ADDENDUM NO. 1

MARKET STREET IMPROVEMENTS and
FIFTH STREET ACTIVE TRANSPORTATION
STP-5507(607) & TAP-5445(613)

COUNTY OF JEFFERSON, MISSOURI

April 3, 2026

This addendum forms a part of the bidding and contract documents and modifies the original bidding documents. Acknowledge receipt of this addendum in the space provided on this bid form. **FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.**

PROJECT SPECIFICATIONS:

STP-5507(607) & TAP-5445(613) Updated Bid Items for Market Street: A few quantities were increased due to the addition of the sidewalk on Parcel 24 as shown on the plan sheets. Remove pages 14 and 15 along with pages 28 and 29 and replace them with pages ADD. 1-14, ADD. 1-15, ADD. 1-28, and ADD. 1-29.

Updated JSPs: JSP R (Exposed Aggregate Concrete Paving) was revised to be clearer about the aggregate type and requirements. JSP X (Group A Pipe Material) was also revised. This JSP originally specified only Reinforced Concrete Pipe and has been revised to also include Thermoplastic Flexible Pipe (Double or Triple Wall Polypropylene Pipe). Remove the Job Special Provisions, signed and sealed on December 23, 2025 (Pages 97 through 147) and replace with the Job Special Provisions, signed and sealed on April 2, 2026 (Pages ADD. 1-97 through ADD. 1-147).

PROJECT PLANS:

STP-5507(607) Updated Plan Sheets for Market Street Improvements: There are ten (10) plan sheets that have been updated. Quantity Sheet 1 of 11, 2 of 11, 5 of 11, and 6 of 11 were updated due to the sidewalk on Parcel 24 that was not included in the original quantities. Plan Sheet 2 of 2 has been updated to show the proposed sidewalk.

BMP Details Sheet 2 of 6 was updated because Section BMP 4 was duplicated on the top and bottom of the sheet, rather than BMP 3 on the top and BMP 4 on the bottom.

Culvert Section Sheet 1 of 2 and Sheet 2 of 2 were updated to reflect the type of pipe being accepted as Group A Pipe Material.

XS Sheet 18 of 20 and XS Sheet 19 of 20 have revisions to the cross sections.

TAP-5445(643)) Updated Plan Sheets for Fifth Street Active Transportation: There is only one (1) sheet in these plans that was revised. Culvert Section Sheet 1 of 1 was revised to reflect the type of pipe being accepted as Group A Pipe Material.

The revisions listed above in the project plans should replace the existing plan sheets. Revised sheets are included in this addendum.

MARKET STREET IMPROVEMENTS

STP-5507(607)

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL
202-20.10	REMOVAL OF IMPROVEMENTS	LS	1		$ 0.00
206-30.00	CLASS 3 EXCAVATION	CY	927		$ 0.00
207-99.09	LINEAR GRADING CLASS 2, MODIFIED	STA	21.1		$ 0.00
304-05.04	TYPE 5 AGGREGATE FOR BASE (4 IN. THICK)	SY	3,068		$ 0.00
304-99.07	PICP SUBBASE STONE	CY	420		$ 0.00
310-50.03	GRAVEL (A) OR CRUSHED STONE (B)	SY	144		$ 0.00
401-12.09	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)	TONS	177.3		$ 0.00
407-10.07	TACK COAT - NON TRACKING	GAL	165		$ 0.00
502-13.08	CONCRETE PAVEMENT (8 IN. NON-REINFORCED, 15 FT. JOINTS)	SY	51.2		$ 0.00
502-99.05	CONCRETE PAVEMENT 7 IN. NON-REINFORCED (EXPOSED AGGREGATE)	SY	391.9		$ 0.00
502-99.05	PERMEABLE INTERLOCKING CONCRETE PAVEMENT	SY	985.3		$ 0.00
603-99.02	ADJUST TO GRADE WATER VALVE	EA	1		$ 0.00
603-99.02	ADJUST TO GRADE WATER METER	EA	10		$ 0.00
603-99.22	SEWER LATERAL ADJUSTMENTS/RELOCATIONS	EA	6		$ 0.00
604-20.10	ADJUSTING MANHOLE	EA	3		$ 0.00
604-20.20	ADJUSTING BASIN OR INLET	EA	3		$ 0.00
604-40.13	PIPE COLLAR, TYPE C	EA	1		$ 0.00
607-99.03	DECORATIVE FENCE	LF	123		$ 0.00
608-10.12	TRUNCATED DOMES	SF	421		$ 0.00
608-50.07	PAVED APPROACH, 7 IN.	SY	145.9		$ 0.00
608-99.05	CONCRETE CURB RAMP (EXPOSED AGGREGATE)	SY	21.6		$ 0.00
608-99.05	CONCRETE SIDEWALK, 4 IN. (EXPOSED AGGREGATE)	SY	1,627.40		$ 0.00
608-99.05	CONCRETE SIDEWALK, 7 IN. (EXPOSED AGGREGATE)	SY	333.4		$ 0.00
609-99.03	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S (EXPOSED AGGREGATE)	LF	47		$ 0.00
609-99.03	PAVER GUTTER	LF	2,208		$ 0.00
614-11.20	CURVED VANE GRATE AND FRAME (2 FT. X 2 FT.)	EA	14		$ 0.00
614-30.13	MANHOLE FRAME AND COVER, TYPE 3	EA	7		$ 0.00
616-10.98A	CHANGEABLE MESSAGE SIGN WITHOUT COMMUNICATION INTERFACE - CONTRACTOR FURNISHED AND RETAINED	EA	1		$ 0.00
616-99.01	LUMP SUM TEMPORARY TRAFFIC CONTROL	LS	1		$ 0.00
618-10.00	MOBILIZATION	LS	1		$ 0.00
622-10.01	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS)	SY	1,638		$ 0.00
624-99.05	GEOMEMBRANE LINEAR SYSTEM	SY	165		$ 0.00
627-40.00	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1		$ 0.00
703-20.02	CLASS B CONCRETE (MISC.)	CY	4.2		$ 0.00
706-10.00	REINFORCING STEEL	LBS	210		$ 0.00
720-99.04	SMALL BLOCK RETAINING WALL	SF	118		$ 0.00
726-10.12	12 IN. PIPE GROUP A	LF	672		$ 0.00
726-10.15	15 IN. PIPE GROUP A	LF	92		$ 0.00
726-99.03	DOWNSPOUT DRAIN PIPE ADJUSTMENT	LF	95		$ 0.00
731-00.48	PRECAST CONCRETE MANHOLE - 48 IN.	FT	25		$ 0.00
731-10.22	PRECAST CONCRETE DROP INLET 2 FT X 2 FT	FT	42		$ 0.00
803-10.00A	TURF TYPE TALL FESCUE SODDING	SY	659		$ 0.00
803-99.05A	LANDSCAPING RESTORATION	SY	13		$ 0.00
806-10.07A	CURB INLET CHECK	EA	17		$ 0.00
806-10.16	SEDIMENT REMOVAL	CY	139		$ 0.00

806-99.03	COMPOST FILTER SOCK	LF	1,206		$ 0.00
901-99.02	POT HOLING UTILITY FACILITIES	EA	22		$ 0.00
903-99.02	REMOVE & RELOCATE GROUND MOUNT SIGN	EA	2		$ 0.00
903-99.02	REMOVE & RELOCATE GROUND MOUNT SIGN SPECIAL	EA	5		$ 0.00
903-99.04	PERMANENT SIGNING	SF	110		$ 0.00
				BASE CONSTRUCTION COST	$ 0.00
	ADD ALTERNATE A				
901-30.04	CONDUIT, 3 IN. RIGID, IN TRENCH	LF	3,300		$ 0.00
901-40.04	CONDUIT, 3 IN. RIGID, PUSHED	LF	82		$ 0.00
901-61.10	PULL BOX, PREFORMED CLASS 1	EA	17		$ 0.00
901-61.12	PULL BOX, PREFORMED CLASS 3	EA	2		$ 0.00
901-70.02	CABLE, 2 AWG 1 CONDUCTOR	LF	4720		$ 0.00
901-70.04	CABLE, 4 AWG 1 CONDUCTOR	LF	4,870		$ 0.00
901-70.06	CABLE, 6 AWG 1 CONDUCTOR	LF	3,330		$ 0.00
901-70.08	CABLE, 8 AWG 1 CONDUCTOR	LF	8,310		$ 0.00
901-71.10	CABLE, 10 AWG 1 CONDUCTOR, POLE AND BRACKET	LF	610		$ 0.00
901-99.02	12 FT. DEORATIVE PEDESTRIAN LIGHT POLE	EA	17		$ 0.00
901-99.02	DECORATIVE PEDESTRIAN LED LUMINAIRE	EA	17		$ 0.00
901-99.02	POLE FOUNDATION (12 FT. MOUNTING HEIGHT)	EA	17		$ 0.00
901-99.02	PAD MOUNTED 240V POWER SUPPLY AND LIGHTING CONTROLLER	EA	1		$ 0.00
				ADD ALTERNATE A CONSTRUCTION COST	$ 0.00
				CONSTRUCTION COST GRAND TOTAL (BASE + ADD ALTERNATE A)	$ 0.00

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STP-5507(607)

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				ADD ALTERNATE A CONSTRUCTION COST	$ 0.00
				CONSTRUCTION COST GRAND TOTAL (BASE + ADD ALTERNATE A)	$ 0.00

Job No.: STP-5507(607), TAP-5445(613)
Route: Market St. and 5th St.
County: Jefferson

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Job No.: STP-5507(607), TAP-5445(613)
Route: Market St. and 5th St.
County: Jefferson

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04/02/2026
Cassandra McKee Lee - Civil
MO PE-2023025373
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JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
725 MAPLE STREET, ROOM 104
HILLSBORO, MO 63050
PHONE: 636-797-5340

CRAWFORD, MURPHY & TILLY, INC.
One Memorial Drive, Suite 500
St. Louis, MO 63102

Certificate of Authority: 000631
Consultant Phone: 314-436-5500

If a seal is present on this sheet, JSP's have been electronically sealed and dated.

JEFFERSON COUNTY, MO
DATE PREPARED: DEC 23, 2025

ADDENDUM DATE:
4/3/2026
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<td colspan="2">Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All</td>
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Job No.: STP-5507(607), TAP-5445(613)
Route: Market St. and 5th St.
County: Jefferson

JOB
SPECIAL PROVISION

A. General - Federal JSP-09-02L

1.0 Description. The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

1.1 This contract requires payment of the prevailing hourly rate of wages for each craft or type of work required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the contractor and the contractor's subcontractors shall pay the higher of these two applicable wage rates. State Wage Rates, Information on the Required Federal Aid Provisions, and the current Federal Wage Rates are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT", "Contractor Resources". Effective Wage Rates will be posted 10 days prior to the applicable bid opening. These supplemental bidding documents have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

1.2 The following documents are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2025 Missouri Standard Plans
For Highway Construction

These supplemental bidding documents contain all current revisions to the published versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

B. Work Zone Traffic Management JSP-02-06N

1.0 Description. Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows.

1.1 Maintaining Work Zones and Work Zone Reviews. The Work Zone Specialist (WZS) shall maintain work zones in accordance with Sec 616.3.3 and as further stated herein. The WZS shall coordinate and implement any changes approved by the engineer. The WZS shall ensure all traffic control devices are maintained in accordance with Sec 616, the work zone is operated within the hours specified by the engineer, and will not deviate from the specified hours without prior approval of the engineer. The WZS is responsible to manage work zone delay in accordance

with these project provisions. When requested by the engineer, the WZS shall submit a weekly report that includes a review of work zone operations for the week. The report shall identify any problems encountered and corrective actions taken. Work zones are subject to unannounced inspections by the engineer and other departmental staff to corroborate the validity of the WZS's review and may require immediate corrective measures and/or additional work zone monitoring.

1.2 Work Zone Deficiencies. Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

2.0 Traffic Management Schedule.

2.1 Traffic management schedules shall be submitted to the engineer for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, the hours traffic control will be in place, and work hours.

2.2 The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.

2.3 The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

2.4 In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

2.5.1 Traffic Safety.

2.5.1.1 Recurring Congestion. Where traffic queues routinely extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the contractor shall extend the advance warning area, as approved by the engineer.

2.5.1.2 Non-Recurring Congestion. When traffic queues extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK

AHEAD, or similar, sign on an undivided highway infrequently, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet and no more than 0.5 mile in advance of the end of the traffic queue on divided highways and no less than 500 feet and no more than 0.5 mile in advance of the end of the traffic queue on undivided highways.

3.0 Work Hour Restrictions.

3.1 Except for emergency work, as determined by the engineer, and long term lane closures required by project phasing, all lanes shall be scheduled to be open to traffic during the five major holiday periods shown below, from 12:00 noon on the last working day preceding the holiday until 6:00 a.m. on the first working day subsequent to the holiday unless otherwise approved by the engineer.

Memorial Day
Labor Day
Thanksgiving
Christmas
New Year's Day

3.1.1 Independence Day. The lane restrictions specified in Section 3.1 shall also apply to Independence Day, except that the restricted periods shall be as follows:

When Independence Day falls on:	The Holiday is Observed on:	Halt Lane Closures beginning at:	Allow Lane Closures to resume at:
Sunday	Monday	Noon on Friday	6:00 a.m. on Tuesday
Monday	Monday	Noon on Friday	6:00 a.m. on Tuesday
Tuesday	Tuesday	Noon on Monday	6:00 a.m. on Wednesday
Wednesday	Wednesday	Noon on Tuesday	6:00 a.m. on Thursday
Thursday	Thursday	Noon on Wednesday	6:00 a.m. on Friday
Friday	Friday	Noon on Thursday	6:00 a.m. on Monday
Saturday	Friday	Noon on Thursday	6:00 a.m. on Monday

3.1.2 The City of Kimmswick will not hold Special Events within two hundred (200) feet of the project limits. The City is allowed to narrow this two hundred (200) feet requirement only in areas where City provided security or law enforcement will prevent encroachment of the Special Event into the project limits. The contractor shall be notified at least two weeks prior to the occurrence of any Special Event, and be made aware of said location within the city limits.

3.1.3 The contractor's working hours and schedule of activities will not be restricted to accommodate any Special Events held by the City of Kimmswick. Any special events are primarily held on weekends. To the greatest extent practical, the contractor will be responsible for maintaining pedestrian access to all properties within the project limits during any Special Events held by the City.

3.2 The contractor shall not perform any construction operation on the roadway, roadbed or active lanes, including the hauling of material within the project limits, during restricted periods, holiday periods or other special events specified in the contract documents.

4.0 Detours and Lane Closures.

4.1 When a changeable message sign (CMS) is provided, the contractor shall use the CMS to notify motorists of future traffic disruption and possible traffic delays one week before traffic is shifted to a detour or prior to lane closures. The CMS shall be installed at a location as approved or directed by the engineer. If a CMS with Communication Interface is required, then the CMS shall be capable of communication prior to installation on right of way. All messages planned for use in the work zone shall be approved and authorized by the engineer or its designee prior to deployment. When permanent dynamic message signs (DMS) owned and operated by MoDOT are located near the project, they may also be used to provide warning and information for the work zone. Permanent DMS shall be operated by the TMC, and any messages planned for use on DMS shall be approved and authorized by the TMC at least 72 hours in advance of the work.

4.2 On Market Street, at least one eastbound lane of traffic shall be maintained at all times for local traffic only, except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. Local traffic only is defined as property owners with businesses or residences, or any service providers needed to support said property owners that reside within the project limits. No through vehicular traffic shall be permitted for streets closed to local traffic only. Through vehicular traffic is defined as visitors, guests, patrons, tourists, etc. with the intent to park, visit, shop, or be entertained at the locations of the property owners within the project limits.

On 5th Street, High Street, Beckett, 4th Street, 3rd Street, 2nd Street, Front Street, and Mill Street within the project limits at least one lane shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic.

The Market Street exit to the parking lot on Parcel 19 should be closed during construction activities on Market Street between 2nd Street and 3rd Street.

On all other roadways, at least one lane of traffic in each direction shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. Periods during which the contractor will be allowed to interrupt traffic will be designated by the engineer. Refer to exhibit 4.3 for visual representation of allowable closures.

4.3 Road Closure Exhibit

5.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract document. All authorized changes in the traffic control plan shall be provided for as specified in Sec 616.

C. Emergency Provisions and Incident Management JSP-90-11A

1.0 The contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from law enforcement or other emergency agencies for incident management. In case of traffic accidents or the need for law enforcement to direct or restore traffic flow through the job site, the contractor shall notify law enforcement or other emergency agencies immediately as needed. The area engineer's office shall also be notified when the contractor requests emergency assistance.

2.0 In addition to the 911 emergency telephone number for ambulance, fire or law enforcement services, the following agencies may also be notified for accident or emergency situation within the project limits.

Missouri Highway Patrol 636-300-2800	
Rock Community Fire Protection District	City of Kimmswick
Fire: 636-296-2211	Police (City Hall): 636-464-7407
Jefferson County EMS: 636-677-3399	Jefferson County Dispatch: 636-797-9999

2.1 This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate law enforcement agency.

2.2 The contractor shall notify law enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the contractor completes this notification with law enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.

3.0 No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

D. Project Contact for Contractor/Bidder Questions JSP-96-05A

1.0 All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Robert Russell, Project Contact
Civil Project Manager II
Jefferson County Department of Public Works
725 Maple Street – P.O. Box 100
Hillsboro, MO 63050
Office Phone: 636-797-5342

Email: rrussell@jeffcomo.org

E. Supplemental Revisions JSP-18-01KK

- Compliance with 2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.

The Missouri Highways and Transportation Commission shall not enter into a contract (or extend or renew a contract) using federal funds to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as substantial or as critical technology as part of any system where the video surveillance and telecommunications equipment was produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- ***Delete Sec 106.9 in its entirety and substitute the following:***

106.9 Buy America Requirements.
Buy America Requirements are waived if the total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

106.9.1 Buy America Requirements for Iron or Steel Products.
The contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where articles, materials or supplies that consist wholly or predominantly of iron or steel or a combination of both are to be permanently incorporated into the contract work, steel and iron material shall be manufactured, from the initial melting stage through the application of coatings, in the USA except for "minimal use" as described herein. Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. Under a general waiver from FHWA the use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

106.9.1.1 Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.

106.9.1.2 "Minimal use" of foreign steel, iron or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent (0.1 percent) of the total contract cost or $2,500.00, whichever is greater. If foreign steel, iron, or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer's written approval obtained prior to placing the material in any work.

106.9.1.3 Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000. The AASHTO Product Evaluation and Audit Solutions compliance program verifies that all steel and iron products fabrication processes conform to 23 CFR 635.410 Buy America Requirements and is an acceptable standard per 23 CFR 635.410(d). AASHTO Product Evaluation and Audit Solutions compliant suppliers will not be required to submit step certification documentation with the shipment for some selected steel and iron materials. The AASHTO Product Evaluation and Audit Solutions compliant supplier shall

maintain the step certification documentation on file and shall provide this documentation to the engineer upon request.

106.9.1.3.1 Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

106.9.1.3.2 Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form (link to certificate form) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the engineer and retained for a period of 3 years after the last reimbursement of the material.

106.9.1.3.3 Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and processed domestically in accordance with CFR Title 23 Section 635.410 Buy America Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

106.9.1.4 When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded in the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

106.9.2 Buy America Requirements for Construction Materials other than iron or steel products.

Construction materials mean articles, materials, or supplies that consist of only one of the items listed. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material. Upon request by the engineer, the contractor shall submit a domestic certification for all construction materials listed that are incorporated into the project.

(a) Non-ferrous metals
(b) Plastic and Polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
(c) Glass (including optic glass)
(d) Fiber optic cable (including drop cable)
(e) Optical fiber
(f) Lumber
(g) Engineered wood
(h) Drywall

106.9.3 Buy America Requirements for Manufactured Products.
Manufactured products mean articles, materials or supplies that have been processed into a specific form and shape, or combined with other articles, materials or supplies to create a product with different properties than the individual articles, materials or supplies. If an item is classified as an iron or steel product, an excluded material, or other product category as specified by law or in 2 CFR part 184, then it is not a manufactured product. However, an article, material or supply classified as a manufactured product may include components that are iron or steel products, excluded materials, or other product categories as specified by law or in 2 CFR part 184. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

106.9.3.1 Produced in the United States, in the case of manufactured products, means:
(A) For projects obligated on or after October 1, 2025, the product was manufactured in the United States; and
(B) For projects obligated on or after October 1, 2026, the product was manufactured in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

106.9.3.2 (i) With respect to precast concrete products that are classified as manufactured products, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of such components shall be included in the applicable calculation for purposes of determining whether the precast concrete product is produced in the United States.
(ii) With respect to intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property and classified as manufactured products, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of cabinets or other enclosures shall be included in the applicable calculation for purposes of determining whether systems referred to in the preceding sentence are produced in the United States.

106.9.4 Waiver for De Minimis Costs for Manufactured and Construction Materials other than iron or steel products.
“The total value of the non-compliant products is no more than the lesser of $1,000,000 or 5% of total applicable costs for the project.” The contractor shall submit to the engineer any non-domestic materials and their total material cost to the engineer. The contractor and the engineer will both track these totals to assure that the minimal usage allowance is not exceeded.

- Third-Party Test Waiver for Concrete Aggregate

1.0 Description. Third party tests may be allowed for determining the durability factor for concrete pavement and concrete masonry aggregate.

2.0 Material. All aggregate for concrete shall be in accordance with Sec 1005.

2.1 MoDOT personnel shall be present at the time of sampling at the quarry. The aggregate sample shall be placed in an approved tamper-evident container (provided by the quarry) for shipment to the third-party testing facility.

2.2 AASHTO T 161 Method B Resistance of Concrete to Rapid Freezing and Thawing, shall be used to determine the aggregate durability factor. All concrete beams for testing shall be 3-inch wide by 4-inch deep by 16-inch long or 3.5-inch wide by 4.5-inch deep by 16-inch long. All beams for testing shall receive a 35-day wet cure fully immersed in saturated lime water prior to initiating the testing process.

2.3 Concrete test beams shall be made using a MoDOT approved concrete pavement mix design.

3.0 Testing Facility Requirements. All third-party test facilities shall meet the requirements outlined in this provision.

3.1 The testing facility shall be AASHTO accredited.

3.1.1 For tests ran after January 1, 2025, accreditation documentation shall be on file with the Construction and Materials Division prior to any tests being performed.

3.1.2 Construction and Materials Division may consider tests completed prior to January 1, 2025, to be acceptable if all sections of this provision are met, with the exception of 3.1.1. Accreditation documentation shall be provided with the test results for tests completed prior to January 1, 2025. No tests completed prior to September 1, 2024, will be accepted.

3.2 The testing facility shall provide their testing process, list of equipment, equipment calibration documentation, and testing certifications or qualifications of technicians performing the AASHTO T 161 Procedure B tests. The testing facility shall provide details on their freezing and thawing apparatus including the time and temperature profile of their freeze-thaw chamber. The profile shall include the temperature set points throughout the entirety of the freeze-thaw cycle. The profile shall show the cycle time at which the apparatus drains/fills with water and the cycle time at which the apparatus begins cooling the specimens.

3.3 Results, no more than five years old, from the third-party test facility shall compare within ±2.0 percent of an independent test from another AASHTO accredited test facility or with MoDOT test records, in order to be approved for use (e.g. test facility results in a durability factor of 79, MoDOT's recent durability test factor is 81; this compared within +2 percent). The independent testing facility shall be in accordance with this provision. The comparison test can be from a different sample of the same ledge combination.

3.4 When there is a dispute between the third party durability test results and MoDOT durability test results, the MoDOT durability test result shall govern.

3.5 Test results shall be submitted to MoDOT's Construction and Materials division electronically for final approval. Test results shall include raw data for all measurements of relative dynamic modulus of elasticity and percent length change for each individual concrete specimen. Raw data shall include initial measurements made at zero cycles and every subsequent measurement of concrete specimens. Raw data shall include the cycle count and date each measurement was taken. Test results shall also include properties of the concrete mixture as required by AASHTO T 161. This shall include the gradation of the coarse aggregate sample. If AASHTO T 152 is used to measure fresh air content, then the aggregate correction factor for the mix determined in accordance with AASHTO T 152 shall also be included.

4.0 Method of Measurement. There is no method of measurement for this provision. The testing requirements and number of specimens shall be in accordance with AASHTO T 161 Procedure B.

5.0 Basis of Payment. No direct payment will be made to the contractor or quarry to recover the cost of aggregate samples, sample shipments, testing equipment, labor to prepare samples or test samples, or developing the durability report.

- ***Delete paragraph 15.0 of the General Provision Disadvantaged Business Enterprise (DBE) Program Requirements and substitute the following*:**

15.0 Bidder's List Quote Summary. MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting**.**

- ***Add Sec 102.7.9 to include the following:***

102.7.9 Bidder's List Quote Summary. Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The information shall be disclosed on the Bidder's List Quote Summary form provided in the bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

F. Utilities JSP-93-26F

1.0 For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

Utility Name	**Known Required Adjustment**	**Type (Utility Notation on Plans)**
Ameren - MO (Distribution - Overhead) Kristine Reed Telephone: (636) 575-7395 Email: kreed@ameren.com	Yes See 2.0	Electric "OE"
Charter Communications (Spectrum) Gary Williams Telephone: (314) 750-9693 Email: Gary.Williams@charter.com	Yes See 3.0	Communications "UTV"
AT&T Distribution Herb Connors Telephone: (314) 250-7971 Email: hc1549@att.com	Yes See 4.0	Communications "UT"
PWSD #10 Keith Flamm Telephone: (314) 623-7640 Email: pwsdtenjc@gmail.com	Yes See 5.0	Water "W"
Spire Energy Brian Langenbacher Telephone: (314) 713-6572 Email: Brian.Langenbacher@spireenergy.com	No See 6.0	Gas "G"
Rock Creek Public Sewer District Jason Seger Telephone: (636) 633-0761 Email: jasons@rockcreekpsd.com	No See 7.0	Sewer

1.1 The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to Jefferson County at this time. This information is provided by Jefferson County "as-is" and Jefferson County expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and Jefferson County shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating

existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

2.0 Ameren - Missouri (Overhead) – Kristine Reed (Utility Plans Legend: OE)

2.1 Ameren advised they have aerial/overhead facilities along the West side of 5th Street, along the North side of Beckett Street, and along the East side of 4th Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (5th Street Plans). Ameren advised their poles along Beckett Street will need to be relocated for conflicts with the new pedestrian sidewalk. Ameren will have three (3) pole relocations along the North side of Beckett Street. Ameren's relocated pole locations are shown on Drainage and Utility Sheet 2 of 2 (5th Street Plans). Ameren advised they plan to begin installing the new poles in early Spring 2026 and be completed before the contractor receives a Notice to Proceed to begin work. Ameren expects this work taking two (2) weeks to complete.

2.2 Ameren advised they have aerial/overhead facilities along the North side of Market Street and along the East side of Front Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (Market Street Plans). Ameren also advised they have aerial/overhead facilities crossing Market Street on 3rd Street and 2nd Street. Ameren advised their poles along Market Street and Front Street will need to be relocated for conflicts with the new pedestrian sidewalk. Ameren will have one (1) pole relocation along the North side of Market Street and one (1) pole relocation along the East side of Front Street. Ameren's relocated pole locations are shown on Drainage and Utility Sheet 2 of 2 (Market Street Plans). Ameren advised they plan to begin installing the new poles in early Spring 2026 and be completed before the contractor receives a Notice to Proceed to begin work. Ameren expects this work taking two (2) weeks to complete.

2.2.1 Ameren advised Ameren's existing pole located at the NW corner of Market Street and 3rd Street may need to be held for the installation of proposed drainage between MH-4 and GI-15. This pole is in public right-of-way. Two days are estimated for Ameren to hold the Ameren pole. The contractor is responsible for contacting Ameren directly through the Ameren Construction Hotline for necessary line covers and pole holds.

3.0 Charter Communications (Spectrum) – Gary Williams (Utility Plans Legend: UTV)

3.1 Charter advised they have aerial/overhead facilities on Ameren's poles along the West side of 5th Street, along the North side of Beckett Street, and along the East side of 4th Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (5th Street Plans). Ameren will have three (3) pole relocations along the North side of Beckett Street. Charter advised they will need to transfer onto Ameren's new poles after they have been set. Ameren's relocated pole locations are shown on Drainage and Utility Sheet 2 of 2 (5th Street Plans). Charter advised their contractor is scheduled to commence work to transfer onto Ameren's new poles soon after Ameren completes their work and take one day for each pole transfer.

3.2 Charter advised they have aerial/overhead facilities on Ameren's poles along the North side of Market Street and along the East side of Front Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (Market Street Plans). Ameren will have one (1) pole relocation along the North side of Market Street and one (1) pole relocation along the East side of Front Street. Charter advised they will need to transfer onto Ameren's new poles after they have been set. Ameren's relocated pole locations are shown on Drainage and Utility Sheet 2 of 2 (Market Street Plans). Charter advised their contractor is scheduled to commence work to transfer onto Ameren's new poles soon after Ameren completes their work and take one day for each pole transfer.

4.0 AT&T - Distribution – Herb Connors (Utility Plans Legend: UT)

4.1 AT&T-D advised they have buried facilities along the West side of 5th Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (5th Street Plans). AT&T-D advised they do not anticipate any conflicts with these facilities.

4.2 AT&T-D advised they have buried facilities along the North and South sides of Beckett Street, as shown on Plan Sheet 2 of 2 (5th Street Plans). AT&T-D advised they do not anticipate any conflicts with these facilities.

4.3 AT&T-D advised they have buried facilities along the East and West sides of 4th Street, as shown on Plan Sheet 2 of 2 (5th Street Plans). AT&T-D's existing cable on the East side of 4th Street is in conflict with the proposed storm pipe between structures GI-1 & MH-2. AT&T-D advised they plan to relocate this cable away from the proposed storm structures. ADB will perform the work for AT&T-D. ADB completed this relocation in October 2025.

4.4 AT&T-D advised they have buried facilities along the North and South sides of Market Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (Market Street Plans). AT&T-D's existing cable on the South side of Market Street is in conflict with proposed storm structures MH-3 & MH-4. AT&T-D's existing cable on the North side of Market Street is in conflict with proposed storm structures GI-4, GI-6, & MH-6. AT&T-D advised they plan to relocate these cables away from the proposed storm structures. ADB will perform the work for AT&T-D. ADB completed this relocation in October 2025.

4.5 AT&T-D advised they have buried facilities along the East side of Front Street, as shown on Plan Sheet 2 of 2 (Market Street Plans). AT&T-D advised they do not anticipate any conflicts with these facilities.

4.6 AT&T-D advised they have buried facilities along the North side of Mill Street, as shown on Plan Sheet 2 of 2 (Market Street Plans). AT&T-D's existing cable is in conflict with proposed storm structures GI-13 & MH-7. AT&T-D advised they plan to relocate this cable away from the proposed storm structures. ADB will perform the work for AT&T-D. ADB completed this relocation in October 2025.

AT&T-D advised if a conflict is determined during contractor potholing of utilities and they need to shift their facilities, AT&T-D needs two (2) week's advanced notice to advise their contractor to mobilize on site and ADB will need five (5) working days to shift AT&T-D's buried facilities.

5.0 PWSD #10 – Keith Flamm (Utility Plans Legend: W)

5.1 PWSD #10 advised they have a water main along the East side of 4th Street, as shown on Plan Sheet 2 of 2 (5th Street Plans). PWSD #10 advised they also have a water service to the West side of 4th Street that crosses proposed drainage runs. PWSD #10 advised they do not anticipate any direct conflicts with their water main and the construction of the proposed storm structures. PWSD #10 advised the water service to the following parcel is in conflict with proposed drainage – Parcel 1. PWSD #10 advised they plan to lower this service to avoid conflict with proposed drainage. PWSD #10 completed this relocation in September 2025.

5.2 PWSD #10 advised they have a water main along the South side of Market Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (Market Street Plans). PWSD #10 advised they also have water services to the South side of Market Street that cross proposed drainage runs. PWSD #10 advised they do not anticipate any direct conflicts with their water main and the construction of the proposed storm structures. PWSD #10 advised the water services to the following parcels are in conflict with proposed drainage – Parcel 14, Parcel 15, Parcel 16, & Parcel 17. PWSD #10 advised they plan to lower these services to avoid conflicts with proposed drainage. PWSD #10 completed these relocations in September 2025.

5.2.1 PWSD #10 advised their existing water main along the South side of Market Street is located in close proximity to proposed storm structures GI-3, GI-5, & GI-7. The existing water main is located directly beneath the proposed storm structures. PWSD #10 advised precautionary measures must be taken to protect the integrity of the main pipe with the inlet setting on it. An inverted cradle with a steel plate shall be installed beneath the three (3) structures listed to disperse the weight of the structure over the main. No direct payment will be made to cover the cost of the inverted cradle, costs will be incidental to construction of the storm inlet. See Special Sheets in the plans for construction details.

5.3 PWSD #10 advised they have a water main along the East side of Front Street, as shown on Plan Sheet 2 of 2 (Market Street Plans). PWSD #10 advised they also have water services to the West side of Front Street that cross proposed drainage runs. PWSD #10 advised they do not anticipate any direct conflicts with their water main and the construction of the proposed storm structures. PWSD #10 advised the water service to the following parcel is in conflict with proposed drainage – Parcel 24. PWSD #10 advised they plan to lower this service to avoid conflict with proposed drainage. PWSD #10 completed this relocation in September 2025.

6.0 Spire Energy – Brian Langenbacher (Utility Plans Legend: G)

6.1 Spire advised they do not have any gas facilities located within the project limits. Spire advised they do not anticipate any conflicts with the proposed work.

7.0 Rock Creek Public Sewer District – Jason Seger (Utility Plans Legend: S)

7.1 Rock Creek Public Sewer District advised they have a sanitary sewer line in the pavement along Market Street, as shown on Plan Sheet 1 of 2 through Plan Sheet 2 of 2 (Market Street Plans). Rock Creek Public Sewer District advised they do not anticipate any conflicts with these facilities.

7.1.1 Rock Creek Public Sewer District advised there are customer owned sewer-lateral lines crossing proposed drainage on the South side of Market Street. It is the contractor's responsibility to pothole these facilities to verify they are not in conflict prior to the installation of proposed drainage. Contractor potholing work shall be included in the cost for storm work bid items in the contract.

G. LPA Buy America Requirements LPA-18-08A

106.9 Buy America Requirement. On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 Buy America Requirements and the Bipartisan Infrastructure Law (2021) Build America, Buy America Act Publication L. No. 117-58 regarding Buy America provisions on the procurement of foreign products and materials. Where steel or iron products or construction materials consisting primarily of non-ferrous metals, plastic and polymer-based products, glass, lumber or drywall are to be permanently incorporated into the contract work, these material shall be manufactured in the USA except for "minor usage" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. The use of pig iron and processed, pelletized and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

106.9.1 Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.

106.9.2 "Minor usage" of the above products or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent of the total contract cost or $2,500.00, whichever is greater. If foreign steel, iron or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer's written approval obtained prior to placing the material in any work.

106.9.3 Buy America requirements include a step certification for all fabrication processes of all mentioned materials that are accepted per Sec 1000.

106.9.3.1 Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

106.9.3.2 Items designated as Category 2 will include all other steel or iron products not in Category 1 and the construction materials under this requirement which are permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form (link to certificate form) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The Engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the Engineer and retained for a period of 3 years after the last reimbursement of the material.

106.9.3.3 Any minor miscellaneous construction material, steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify all materials permanently incorporated in this project covered under this provision have been to the best of my knowledge procured and all manufactured domestically." The certification shall be signed by an authorized representative of the prime contractor.

106.9.3.4 The National Transportation Product Evaluation Program (NTPEP) compliance program verifies that some non-iron and steel products fabrication processes conform to 23 CFR 635.410 Buy America Requirements and an acceptable standard per 23 CFR 635.410(d). NTPEP compliant suppliers will not be required to submit step certification documentation with the shipment for some selected non-iron and steel materials. The NTPEP compliant supplier shall maintain the step certification documentation on file and shall provide this documentation to the engineer upon request.

106.9.4 When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

106.9.5 Basis of Payment. Any costs incurred by the contractor by reason of compliance with the above requirements shall be considered as included in and completely covered by the unit price bid for the various items of work included in the contract.

H. Projects Let in Combination

1.0 Description. Two projects, STP-5507(607) and TAP-5445(613) are being let in required combination. The contractor shall coordinate all items of construction for the overlapping project limits between the two jobs.

2.0 Basis of Payment. No payment shall be made to satisfy this provision.

I. Non-Participating Items

1.0 Description. The contractor shall be advised that there are non-participating items associated with the Market Street Improvements Project. The funding agreement set up for the project requires that the roadway items along Front Street denoted on the plans shall be paid for by the County as non-participating.

2.0 Requirements. Unit prices for participating and non-participating items with the same bid item number and description shall not differ.

J. Add Alternates

1.0 Description. This contract requires bidders to bid on additional contract work that will be considered for award. The award of this project does not guarantee work for all add alternate sections.

Routes	Proposal Section Description
Market Street STP-5507(607)	Base
Lighting	Add Alternate A

Routes	Proposal Section Description
5th Street TAP-5445(613)	Base
Lighting	Add Alternate A

Note: See plans for a breakdown of all quantities for each add alternate section.

2.0 Consideration of Bids. The contractor shall submit a bid for each add alternate section. The County reserves the right to award, to the lowest responsible bidder, the combination of base plus add alternate sections that will allow the most work to be completed within the County's budget. If the County chooses to exercise this right, the award of add alternate sections will be selected in accordance with the following priorities:

1. Base + Add Alt A
2. Base

2.2 The County's budget is the basis for award of add alternates but not the basis for award of the base section. The base section of the contract will be awarded or rejected in accordance with Section 100.

2.3 The awarded bidder will be notified of the County's selection of the combination of add alternate sections to be awarded the day of the County meeting.

2.4 The Add Alternates shall include costs associated with mobilization, contractor surveying and staking, and traffic control.

3.0 Bid Bond Requirements. The contractor shall be required to obtain a bid bond for 5% of the total bid amount for the base bid and all add alternates. This bid bond will be considered applicable to the proposed work for any option.

4.0 Basis of Payment. The accepted quantities of the chosen combination of base plus add alternate sections will be paid for by the contract unit bid price for item numbers found within the schedule of items for each section.

K. ADA Compliance and Final Acceptance of Constructed Facilities LPA-15-07B

1.0 Description. The contractor shall comply with all laws pertaining to the Americans with Disabilities Act (ADA) during construction of pedestrian facilities on public rights of way for this project. An ADA Checklist is provided herein to be utilized by the contractor for verifying compliance with the ADA law. The contractor is expected to familiarize himself with the plans involving pedestrian facilities and the ADA Post Construction Checklist prior to performing the work.

2.0 ADA Checklist. The contractor can locate the ADA Checklist form on the Missouri Department of Transportation website:

www.modot.org/business/contractor_resources/forms.htm

2.1 The ADA Checklist is not to be considered all-inclusive, nor does it supersede any other contract requirements. The ADA checklist is a required guide for the contractor to use during the construction of the pedestrian facilities and a basis for the County's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. This notification shall be made in writing. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

2.2 It is encouraged that the contractor monitor the completed sections of the newly constructed pedestrian facilities in attempts to minimize negative impacts that his equipment, subcontractors or general public may have on the work. Completed facilities must comply with the requirements of ADA and the ADA Checklist or have documented reasons for the non-compliant items to remain.

3.0 Coordination of Construction.

3.1 Prior to construction and/or closure on an existing pedestrian path of travel, the contractor shall submit a schedule of work to be constructed, which includes location of work performed, the duration of time the contractor expects to impact the facility and an accessible signed pedestrian detour compliant with MUTCD Section 6D that will be used during each stage of construction. This plan shall be submitted to the engineer for review and approval at or prior to the pre-construction conference. Accessible signed detours shall be in place prior to any work being performed that has the effect of closing an existing pedestrian travel way.

3.2 When consultant survey is included in the contract, the contractor shall use their survey crews to verify that the intended design can be constructed to the full requirements as established in the 2010 ADA Standards. When 2010 ADA Standards do not give sufficient information to construct the contract work, the contractor shall refer to the PROWAG.

3.3 When consultant survey is not included in the contract, the contractor shall coordinate with the engineer, prior to construction, to determine if additional survey will be required to confirm the designs constructability.

4.0 Final Acceptance of Work. The contractor shall provide the completed ADA Checklist to the engineer at the semi-final inspection. ADA improvements require final inspection and compliance with the ADA requirements and the ADA Checklist. Each item listed in the checklist must receive either a "YES" or an "N/A" score. Any item receiving a "NO" will be deemed non-compliant and shall be corrected at the contractor's expense unless deemed otherwise by the engineer. Documentation must be provided about the location of any non-compliant items that are allowed to remain at the end of the construction project. Specific details of the non-compliant items, the ADA requirement that the work was not able to comply with, and the specific reasons that justify the exception are to be included with the completed ADA Checklist provided to the engineer.

4.1 Slope and grade measurements shall be made using a properly calibrated, 2 foot long, electronic digital level approved by the engineer.

5.0 Basis of Payment. The contractor will receive full pay of the contract unit cost for all sidewalk, ramp, curb ramp, median, island, approach work, cross walk striping, APS buttons, pedestrian heads, detectible warning systems and temporary traffic control measures that are completed during the current estimate period as approved by the engineer. Based upon completion of the ADA Checklist, the contractor shall complete any necessary adjustments to items deemed non-compliant as directed by the engineer.

5.1 No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract documents.

L. Property Access

1.0 Description. Access shall be maintained at all times to the local property owners within the project limits through the duration of the paved approach, sidewalk, and sideroad construction or road closures. The contractor shall take all necessary steps to provide reasonable access accommodations to the property owners within the project limits. Under no circumstances shall any property owner be left without access to their property.

1.1 It shall be the contractor's responsibility to inform and notify the adjacent property owner 1 week prior to starting any construction activities that may impact driveway, sidewalk, building entrance, and parking lot access or occur along the frontage of the property owner's parcel. The notification shall be in written form and include the contractor's contact information, the Engineer's contact information, and an estimated schedule of work and the associated impacts.

1.2 The contractor shall accommodate pedestrian movements of all visitors to the property owners within the project limits to the greatest extent practical for the duration of the project. Given that many of the businesses within the project area experience deliveries and heavy foot traffic from Market Street and Front Street, it is expected that the contractor maintain open communication with the Engineer and property owners to minimize disruptions to businesses when possible.

2.0 Basis of Payment. No Direct Payment will be made for compliance with this provision.

M. Coordination with Windsor School District

1.0 Description. The contractor shall be aware that Windsor Elementary School is adjacent to the project limits.

2.0 Requirements. The contractor shall coordinate with Windsor School District at least 14 days in advance of work on High Street.

Contact Information:
Phone: 636-464-4498
Email: transportation@windsorc1.com

The contractor shall be aware that 5th Street and the area surrounding Windsor Elementary School experiences heavy traffic on school days from 7:45 AM to 8:15 AM and 3:00 PM to 3:30 PM. The contractor should minimize disruptions to school traffic whenever possible.

N. Special Conditions for Historic Properties

1.0 Description. The Contractor is notified that the project occurs within the Kimmswick Historic District, listed in the National Register of Historic Places (NRHP) (historic property).

2.0 Construction Requirements. The contractor shall use extreme care when working adjacent to historic properties, to protect features that contribute to historical significance, including contributing elements immediately adjacent to existing right of way, specifically including features at:

- 102 Mill Street
- 111 Market Street
- 118 Market Street
- 119 Market Street
- 205 Market Street
- 209 Market Street
- 216 Market Street
- 217 Market Street
- 218 Market Street
- 318 Market Street
- 321 Market Street
- 326 Market Street
- 6061 Front Street
- 6101 Front Street
- 6106 Front Street
- 6109 Front Street
- 6112-6114 Front Street

2.1 When removing sidewalks adjacent to building foundations or other contributing elements, including, but not limited to, stone or concrete walls, the contractor shall use saws to cut existing sidewalk materials for removal using the gentlest means possible.

2.2 The contractor shall use expansion joints when placing new sidewalk material adjacent to historic building foundations and contributing resources, including, but not limited to, stone

and concrete walls. All existing infrastructure (including infrastructure in historic districts), as well as previously built new infrastructure which has hardened, shall be protected by ½ inch expansion joints against all new work, then sealed with a high quality sealant along the entire length.

3.0 Basis of Payment. No payment shall be made to satisfy this provision. If the contractor fails to comply with this provision, federal funding could be jeopardized, thus forcing MoDOT to suspend the project. No time extensions will be granted due to the contractor's failure to comply with this provision.

O. Non-Tracking Tack Coat

1.0 Description. This work requires application of tack in accordance with Sec 407 and prevention of tack loss from the surface as specified herein. Tack loss prevention shall be accomplished with successful usage of a MoDOT-approved non-tracking tack, or other acceptable non-tracking means, as approved by the engineer.

2.0 Non-Tracking Requirements. Non-tracking tack shall remain adhered to the pavement surface when exposed to any wheeled or tracked vehicles. The tack shall not track off the surface within 30 minutes of being applied, and shall not stick to the tires, tracks or other parts of paving equipment or vehicles such that the underlying surface becomes visible or void of tack prior to the placement of the hot mix asphalt. The tack shall not track onto any adjacent lanes, pavement markings, driveways, sideroads, etc.

2.1 The contractor shall be responsible for cleaning all tracked tack from adjacent lanes, driveways, sideroads, etc., and shall replace all pavement markings that become coated with tracked tack. This cleaning and replacement requirement applies to both approved and proposed non-tracking products.

3.0 Basis of Payment. Measurement and payment shall be in accordance with Sec 407. The accepted quantity of non-tracking tack coat will be paid for per gallon at the contract unit price for 407-10.07 Tack Coat – Non-Tracking, per gallon. No additional payment will be made for the cost to demonstrate proposed products, for cleaning surfaces due to tracking of tack, or for replacement of pavement marking damaged by tracked tack.

Item Number	Description	Unit
407-10.07	Tack Coat –Non-Tracking	Gallon

P. Linear Grading Class 2 – Modified

1.0 Description. Modified Linear Grading Class 2 shall consist of any necessary clearing and grubbing in accordance with Sec 201, preparing subgrade for shoulder, pavement widening, sidewalk, paved approaches, curb and gutter, roadside retaining wall, or other roadside appurtenances by excavating, compacting, fin-grading, and shaping existing shoulder and ditch for-slope, conforming to the typical section shown on the plans. It may be necessary to haul material.

2.0 Construction Requirements. The shoulder, pavement widening, sidewalk, curb and gutter, paved approaches, roadside retaining wall, or other roadside appurtenances shall be excavated and graded as shown on the typical section with minimal disturbance of the existing sub-grade

and fore slope. Density shall be obtained from reasonable compactive efforts consisting of no less than three passes with a roller until no further visible compaction can be achieved, or by other methods approved by the Engineer. Subgrade preparation and compaction shall also be in accordance with Sections 203, 209 and 210.

2.1 All ditches shall be graded to drain and maintain existing flow capacity, unless approved by the engineer. If fill material for the shoulder widening work impacts the ditch capacity, the contractor shall re-grade the backslope to maintain the flow capacity of the ditch. Fore slopes and back slopes shall be constructed at a 3:1, except as noted on the plans or approved otherwise by the engineer.

2.2 It may be necessary to go outside the limits of the right of way to obtain additional material or to dispose of excess material. All costs for providing additional material or disposing of excess material shall be included at the contract unit price for pay item 207-99.09, Modified Linear Grading, Class 2. All contractor furnished material shall be approved by the Engineer prior to being incorporated into the project. Quarry screenings will not be considered an approved contractor furnished material.

2.3 Included in this work is any pavement edge treatment that might be necessary to stay in compliance with the Standard Plans. The need for edge treatment is determined by the contractor's method of operations.

3.0 Method of Measurement. Measurement will be made to the nearest 1/10 station separately for the length of pavement edge along each side of the roadway, measured along centerline of the traveled way and totaled to the nearest Station for the sum of all segments in accordance with Section 207.

4.0 Basis of Payment. Payment for Modified Linear Grading, Class 2 as described in this provision will be made at the contract unit price for:

Item Number	Unit	Description
207-99.09	Station	Linear Grading Class 2, Modified

Q. Lump Sum Temporary Traffic Control JSP-22-01B

1.0 Delete Sec 616.11 and insert the following:

616.11 Method of Measurement. Measurement for relocation of post-mounted signs will be made to the nearest square foot of sign area only for the signs designated for payment on the plans. All other sign relocations shall be incidental. Measurement for construction signs will be made to the nearest square foot of sign area. Measurement will be made per each for each of the temporary traffic control items provided in the contract.

616.11.1 Lump Sum Temporary Traffic Control. No measurement will be made for temporary traffic control items grouped and designated to be paid per lump sum. The list of lump sum items provided in the plans or contract is considered an approximation and may be subject to change based on field conditions. This is not a complete list and may exclude quantities for duplicate work zone packages used in simultaneous operations. The contractor shall provide all traffic control devices required to execute the provided traffic control plans for each applicable operation,

stage, or phase. No measurement will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer.

2.0 Delete Sec 616.12 and insert the following:

616.12 Basis of Payment. All temporary traffic control devices authorized for installation by the engineer will be paid for at the contract unit price for each of the pay items included in the contract. Whether the devices are paid individually, or per lump sum, no direct payment will be made for the following:

(a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.

(b) Installing, operating, maintaining, cleaning, repairing, removing, or replacing traffic control devices.

(c) Covering and uncovering existing signs and other traffic control devices.

(d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.

(e) Worker apparel.

(f) Flaggers, AFADs, PFDs, pilot vehicles, and appurtenances at flagging stations.

(g) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.

(h) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.

(i) Provide and maintaining work zone lighting and work area lighting.

616.12.1 Lump Sum Temporary Traffic Control. Traffic control items grouped together in the contract or plans for lump sum payment shall be paid incrementally per Sec 616.12.1.1. Alternately, upon request from the contractor, the engineer will consider a modified payment schedule that more accurately reflects completion of traffic control work. No payment will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer. Additional items directed by the engineer will be paid for in accordance with Sec 109.4. No adjustment to the price will be made for overruns or underruns of other work or for added work that is completed within existing work zones.

616.12.1.1 Partial payments. For purposes of determining partial payments, the original contract amount will be the total dollar value of all original contract line items less the price for Lump Sum Temporary Traffic Control (LSTTC). If the contract includes multiple projects, this determination will be made for each project. Partial payments will be made as follows:

(a) The first payment will be made when five percent of the original contract amount is earned. The payment will be 50 percent of the price for LSTTC, or five percent of the original contract amount, whichever is less.

(b) The second payment will be made when 50 percent of the original contract amount is earned. The payment will be 25 percent of the price for LSTTC, or 2.5 percent of the original contract amount, whichever is less.

(c) The third payment will be made when 75 percent of the original contract amount is earned. The payment will be 20 percent of the price for LSTTC, or two percent of the original contract amount, whichever is less.

(d) Payment for the remaining balance due for LSTTC will be made when the contract has been accepted for maintenance or earlier as approved by the engineer.

616.12.1.2 Temporary traffic control will be paid for at the contract lump sum price for Item:

Item No.	Unit	Description
616-99.01	Lump Sum	Misc. Lump Sum Temporary Traffic Control

1 REVISED

R. Exposed Aggregate Concrete Paving

1.0 Description. This work shall consist of constructing exposed aggregate concrete sidewalk and curb ramps, exposed aggregate concrete integral curb, exposed aggregate concrete type S curb, and exposed aggregate non-reinforced concrete pavement.

Exposed aggregate concrete shall use a single concrete mixture and aggregate source for all applications and shall provide a uniform appearance across all exposed aggregate surfaces.

2.0 Construction Requirements. Except as modified herein, exposed aggregate concrete work shall be performed in accordance with the following Missouri Department of Transportation (MoDOT) Standard Specifications for Highway Construction:

- Section 501 – Portland Cement Concrete – General
- Section 502 – Portland Cement Concrete Base and Pavement
- Section 608 – Concrete Sidewalk and Curb Ramps
- Section 609 – Concrete Curb

3.0 Materials. Concrete for all exposed aggregate sidewalks, curb ramps, curbs, and pavement shall conform to Section 501, except as modified herein. The same concrete mixture shall be used for all exposed aggregate applications, including areas subject to vehicular traffic. Exposed aggregate shall be considered a surface finish treatment only and shall not reduce required concrete pavement properties.

3.1 Cement. Portland cement shall conform to ASTM C150, Type I, and shall be from a single source.

3.2 Aggregates. ASTM C 33, and as herein specified. To be of the type Meramec sand and gravel suitable for use in concrete pavement applications. Provide aggregates from a single source. Do not use fine or coarse aggregates containing spall-causing or other deleterious substances.

3.3 Water. Potable.

3.4 Admixtures.

Pozzolanic Admixtures: Pozzolanic admixtures shall be fly ash or raw or calcined material pozzolans meeting the requirements of ASTM C 618 Type C or Type F with the exception of loss of ignition, where the maximum should be less than 6%. Although it is not mandatory to use fly ash concrete on the project, the Contractor may substitute up to 10% fly ash by weight for cement. The fly ash shall be included in the mix design.

Air-Entraining Admixtures: Air-entraining admixtures shall meet the requirements of ASTM C 260 and shall be added to the mixer in the amount necessary to produce the specified air content. The air-entrainment agent and the water reducer admixture shall be compatible.

Water-Reducing Admixtures: Water-reducing, set-controlling admixtures shall meet the requirements of ASTM C 494, Type A, water-reducing or Type D, water-reducing and retarding admixtures, and shall be added at the mixer separately from air-entraining admixtures in accordance with the manufacturer's printed instructions.

3.5 Liquid-Membrane Forming and Sealing Curing Compound. Comply with ASTM C 309, Type 2, Class B unless otherwise approved by the Engineer. Curing compound shall be applied after completion of aggregate exposure and surface cleaning.

The concrete shall be designed to produce normal-weight concrete consisting of Portland cement, aggregate, pozzolanic admixture, water-reducing or high-range water-reducing admixture (super plasticizer), air-entraining admixture, and water to produce the following properties:

- Compressive Strength: 4,000 psi minimum at 28 days
- Maximum Water-to-Cementitious Materials Ratio: 0.50
- Air Content: 5 to 8 percent
- Slump: Maximum 4 inches prior to the addition of water-reducing admixtures

4.0 Exposed Aggregate Finish. All exposed aggregate surfaces shall receive a uniform exposed aggregate finish using a chemical surface retarder. Exposed aggregate surfaces are intended to provide a warm beige appearance and to visually differentiate these areas from adjacent conventional driving surfaces. Finished surfaces shall be free of loose aggregate, excessive voids, or surface raveling.

4.1 Surface Retarder. A spray-applied, film-forming surface retarder designed for exposed aggregate concrete shall be used. Retarder type and exposure depth shall be compatible with the specified aggregate size. Retarder shall be applied in accordance with the manufacturer's recommendations.

4.2 Aggregate Exposure. The depth of exposure shall be uniform and controlled to avoid excessive paste removal. Aggregate exposure shall be suitable for pedestrian use and low-speed vehicular traffic.

4.3 Joints. Joints shall be constructed in accordance with the applicable MoDOT sections for sidewalks, curbs, and pavement. Joints in exposed aggregate pavement shall be constructed and sealed to minimize spalling and distress under low-speed vehicular traffic.

5.0 Quality Assurance. Contractor shall submit concrete mix design to the Engineer for approval.

The Contractor shall also provide a mock-up of the exposed-aggregate concrete sidewalk for County approval. The mock-up should be built in a designated area on site. This area shall be used to determine color and texture of the job and used as the standard by which the work will be judged. The mock-up is subject to the acceptance by the Owner and may be retained as part of the finished work. If the mock-up is not retained, it shall be removed and properly disposed of.

6.0 Basis of Payment.

Payment will be considered full compensation for the excavation, labor, and material necessary for installation of these items and shall be included under the contract unit price for each item defined below:

Item Number	Unit	Description
502-99.05(A)	SQYD	Concrete Pavement, 7 IN. Non-Reinforced, 15 FT. Joints (Exposed Aggregate)
608-99.05(A)	SQYD	Concrete Curb Ramp (Exposed Aggregate)
608-99.05(B)	SQYD	Concrete Sidewalk, 4 IN. (Exposed Aggregate)
608-99.05(C)	SQYD	Concrete Sidewalk, 7 IN. (Exposed Aggregate)
609-99.03(A)	LF	Concrete Curb (6 IN. Height and Under) Type S (Exposed Aggregate)
609-99.03(B)	LF	Integral Curb (6 IN. Height and Under) Type A (Exposed Aggregate)

S. Permeable Interlocking Concrete Pavement

1.0 Description. This work shall consist of constructing a permeable interlocking concrete pavement (PICP or pavers) system at the locations designated in the plans. The paver system, in conjunction with an infiltration trench, will be used to provide water quality volume (WQv) per the Metropolitan St. Louis Sewer District (MSD) performance criteria and as detailed in the Special Sheets and/or per manufacturer's installation instructions.

2.0 References. In addition to notes included in the plans, the design and construction of the permeable interlocking concrete pavement shall adhere to the following references when applicable.

2.1 Public Right-of-Way Accessibility Guidelines (PROWAG)
(a) Technical Requirements (available at www.access-board.gov)

2.2 The Metropolitan St. Louis Sewer District (MSD) (available at www.projectclear.org)
(a) Best Management Practices (BMP) Toolbox (provisional use approval letters for PICP)
(b) 2000 Maryland Stormwater Design Manual
(c) Permeable Interlocking Concrete Pavement details within the plan set.

2.2 Interlocking Concrete Pavement Institute (ICPI) (available on www.icpi.org)
(a) Permeable Interlocking Concrete Pavement Manual.
(b) PICP Guide to Construction Specifications.

2.3 American Society for Testing and Materials (ASTM)

(a) All applicable testing methods, material classifications which may be required for construction of the Permeable Interlocking Concrete Pavement.

2.4 Geotechnical Exploration(s)

(a) Kimmswick Infiltration Testing performed by Geotechnology, LLC, DBA UES, dated May 20, 2025.

3.0 Contractor Submittals to Engineer. The following shall be submitted and approved by the Engineer prior to the ordering or implementation of the material during construction, unless otherwise noted:

3.1 The Contractor shall provide verification that the installing contractor who will be responsible for constructing the permeable interlocking concrete pavement (PICP) will provide the as-built certification which includes:

(a) Past history demonstrating applicable experience.
(b) The PICP installation contractor must be a current Level 1 certificate from the Interlocking Concrete Pavement Institute's concrete paver installer program or a certified concrete pavement installer through the Concrete Masonry and Hardscapes Association.

3.2 The Contractor shall submit subcontractor's drawings and details for paver installation prior to construction which may include (but not limited to):

(a) Indicate perimeter conditions, junction with other materials, expansion and control joints, paver layout and pattern(s), and installation details.
(b) Indicate layout, pattern and relationship of paving joints to fixtures, and project formed details.
(c) Method Statement and Quality Control Plan that describes material staging and flow, paving direction and installation procedures.

3.3 To ensure design criteria are met, a mock-up shall be constructed. The Contractor shall submit the following for approval:

(a) Proposed concrete paver selection for use in mock-up with a minimum size of 4' wide by 4' long.
    - Four representative full-size samples of each paver type, thickness, color, and finish. The representative samples shall indicate the range of color expected in the finished installation.
    - The mock-up should be built in a designated area on site. This area shall be used to determine surcharge of the bedding layer, joint sizes, and lines, laying pattern, color and texture of the job and used as the standard by which the work will be judged. The mock-up is subject to the acceptance by the Owner and may be retained as part of the finished work. If the mock-up is not retained, it shall be removed and properly disposed of.
(b) Minimum 3 lb (2 kg) samples of subbase, base and bedding aggregate materials to be used in a mock-up.

3.4 Prior to ordering the required quantities for construction, the Contractor shall submit material certifications for all items being installed for the PICP for approval, which may include (but not limited to):

(a) Proposed concrete paver selection shall be compliant with MSD's Approved Products and Suppliers available on MSD's Best Management Practices (BMP) Toolbox.
    - Paver manufacturer's catalog sheets with product specifications.

- The contractor shall obtain the concrete paver manufacturer's certification that the paving units supplied to construct the PICP have been approved by MSD and meet the requirements in ASTM C936.
- The certification shall include the manufacturer's name, and state that the PICP supplied meets the ASTM C936 specifications, (testing should be current within previous 12 months) and that the paving materials meet all requirements as evaluated under the manufacturer's quality control program.

(b) Bedding material, base and subbase aggregate material gradation reports.
(c) Geotechnical filter fabric.
(d) PVC underdrains, cleanouts and observation well assemblies.
(e) BMP sign, post and base materials.

4.0 Quality Assurance. The Contractor shall adhere to a quality assurance plan to ensure the proper installation of the permeable interlocking concrete pavement system. The Contractor shall, but is not limited to:

(a) Conduct a pre-construction meeting of representatives from the manufacturer, paver installation subcontractor, general contractor, engineer and/or owner's representative.
(b) Submit all required documentation and certifications for Engineer review and approval.
(c) Preparation of a mock-up as indicated in the project documents.
(d) The contractor shall prevent and divert sediment from entering the subbase and pavement surface until the tributary areas are deemed stable by the assigned construction inspector.
(e) Vehicular traffic shall be prohibited on the PICP until the site is stable to prevent mud from being deposited by vehicles.
(f) The permeable interlocking concrete pavement shall not be installed in rain or snow. No frozen bedding materials shall be installed.
(g) Do not clean the paver surface with high-pressure hoses or abrasives. When cleaning is necessary, combination cleaning machines that combine a wet spray and vacuum process have been found to be effective.

5.0 Delivery Storage, and Handling. Delivery, storage and handling shall comply with all applicable MoDOT and MSD specifications. The Contractor shall comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delay.

(a) Deliver materials in manufacturer's original, unopened, undamaged container packaging with identification tags intact on each paver bundle. Pavers shall be unloaded at job site in such a manner that no damage occurs to the product or existing construction.
(b) Storage and Protection: Store materials in a protected area such that they are kept free from mud, dirt, and other foreign materials.
(c) Provide 10% additional paver material for use by Owner for maintenance and repair. Extra pavers shall be from the same production run as installed materials.

6.0 Materials. The contractor shall select a pervious paver listed on MSD's Approved Products and Suppliers available on MSD's Best Management Practices (BMP) Toolbox with a Provisional Use Level (PUL) approval as A Structural BMP.

6.1 Permeable Concrete Pavers.

(a) Subject to compliance with requirements, available suppliers/manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
- Belgard Hardscapes: Eco-Hollandstone
- Building Products Corp: Advanced Pavement Technology - Eco-Brick

- Midwest Block & Brick: Eco-Citylock

(a) Solid interlocking paving units resistant to freezing and thawing, made from normal-weight aggregates.
(b) Pavers shall be Standard Series, Rectangular Pavers.
- Thickness: 3 1/8 inches.
- Face Size and Shape: 5-by-10-inch rectangle.
- Color: light beige / light brown blends
- Pattern: Permeable Concrete Pavers shall be set in a Herringbone pattern.

6.2 Aggregate Materials.

(a) 2" thick Bedding Stone shall meet ASTM No. 8 or 9 stone.
(b) 4" thick base stone shall meet ASTM No. 57 (or similar size).
(c) Variable thickness subbase stone shall meet ASTM No. 2 (or similar size with a minimum of 40% voids)
- Stone should be clean, washed, 90 percent fractured faces with a Los Angeles Abrasion Index of less than 40 and conform to the grading requirements in ASTM D448.

(d) Paver system opening and joint stone shall meet ASTM Number 8 crushed aggregate stone, unless otherwise indicated by the manufacturer.
- Stone should be clean, washed, open grade crushed stone and include a void ratio of 40%.

6.3 Geotextile Materials and Geomembrane Liner.

(a) The Contractor must submit to the Engineer a certification from the manufacturer of the sheeting geotextile fabric and geomembrane stating that the sheeting meets physical property requirements for the intended application.
(b) Nonwoven, Needle-Punched Polypropylene Geotextile Fabric shall meet specifications for MSD Type 4 filter fabric. The filter fabric shall be Mirafi 140N or approved equal, with requirements for lighter-weight fabrics as shown in Table 1.
(c) Nonwoven, impermeable geomembrane High-Density Polyethylene (HDPE) shall be new and comprised of material manufactured of first-quality products designed and manufactured specifically for the purpose of liquid containment in hydraulic structures. The geomembrane liner shall be GSE HD Black Smooth, or approved equal, with requirements as shown in Table 1.
- The geomembrane may be smooth or textured on both sides. The surface of the geomembrane must not have striation, pinholes, or bubbles and must be so produced to be free of holes, blisters, undispersed raw materials, or any contamination of foreign matter. Any defects must be reported to the Engineer immediately after discovery and replaced or repaired under the direction of the Engineer at the Contractor's expense. If repair is required, extrusion fusion welding technique must be performed in conformance with the manufacturer's recommendations.
- The geomembrane must be manufactured in a minimum width necessary to provide a seamless installation along the bottom and each side of the infiltration trench. Labels on the roll must identify the thickness, length, width, and manufacturer's batch and roll number. There must be no factory seams.
- All welding material must be of a type recommended by the manufacturer.

(d) Geomembrane Liner System. The liner method system shall consist of a layer of 60 mil HDPE geomembrane. A nonwoven geotextile fabric must be placed on the top and bottom of the geomembrane for puncture protection.

Table 1: Geotextile and Geomembrane Specifications *

Property	Geotextile Fabric	Geomembrane Fabric	Test Method
Nominal Thickness	55 mils	60 mils	ASTM D5199
Density (min)	4.8 oz/yd^2	≥ 0.940 g/cm^3	ASTM D792
Apparent Opening Size (AOS) (max)	U.S. Sieve 70	0	ASTM D4751
Permittivity	1.8 sec^{-1}	--	ASTM D4491
Permeability	0.21 cm/sec	0	ASTM D4491
Flow Rate	135 gal/min/ft^2	0	ASTM D4491
Tensile Strength at Break (min)	240 lb/in width	240 lb/in width	ASTM D6693
Tensile Strength at Yield (min)	140 lb/in width	130 lb/in width	ASTM D6693
Elongation at Break (min)	--	700%	ASTM D6693
Elongation at Yield (min)	50%	13%	ASTM D6693
Tear Resistance Initiation (typ)	--	42.0 lb	ASTM D1004
Low Temperature Brittleness (typ)	--	-105 °F	ASTM D746
Dimensional Stability Change Each Direction (max)	--	±2%	ASTM D1204
Puncture Resistance (typ)	65 lb	120 lb	ASTM D4833

* Note: Minimum values, unless otherwise specified, are average roll values as reported by the specific test methods.

6.4 Polyvinyl Chloride (PVC) Pipe and Fittings.

(a) PVC Schedule pipe and fittings shall be used for PVC applications with pipes less than 8” in diameter.
- Non-pressure Applications: Schedule 40
- Pressure Applications: Schedule 80

(b) Manufacturers - Gravity Pipe PVC Pipe shall be manufactured by one of the following:
- Diamond Plastics
- CertainTeed Corporation
- JM Eagle
- North American Pipe Corporation
- Or approved equal

(c) PVC Schedule pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds meeting the requirements of ASTM D1784, ASTM D1785, and ASTM D2665, and ANSI/NSF 61/14

(d) PVC Schedule pipe shall be Iron Pipe Size (IPS)
- PVC Schedule 80 fittings shall conform to ASTM D 2467.
- PVC Schedule 80 threaded fittings shall conform to ASTM D 2464.
- PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785.
- PVC Schedule 40 fittings shall conform to ASTM D 2466.
- Unions and flanges meet the requirements of ASTM F 1970 with gasket that is compatible with intended service.

- Solvent cement and primer shall conform to ASTM D 2564 and shall be as recommended by the pipe and fitting manufacturer. Cement shall be listed by manufacturer for compatibility with specific chemical services. Cement for chemical piping systems shall be IPS Weld-On CPVC 724 or Ipex Zirtec 24 CPVC cement or shall be listed by manufacturer for compatibility with specific chemical service.
- Pipe and fittings shall be manufactured as a system and be the product of one manufacturer.
- All pipe and fittings shall be manufactured in the United States.

(e) Perforated PVC Underdrain pipe shall incorporate 3/8" perforations on 12" centers, 2 rows, located at 5 o'clock and 7 o'clock, respectively.

6.5 Accessory Drainage Components. All additional drainage components, including but not limited to, clean outs, lids, etc. shall comply with MSD standards, except as specified herein.

(a) Cleanouts and observation well lids shall be rated for vehicle traffic.

6.6 Product Substitutions. No product or material substitutions are permitted unless previously approved by the Engineer or by the Construction Inspector assigned to the project.

(a) All substitutions shall be presented to the Engineer responsible for the design of the PICP system.

7.0 Construction Requirements. The permeable paver water quality systems are designed to completely drain within 12 to 72 hours of a design storm event. Due to potential runoff contamination into the water quality system, it is strongly recommended that the permeable paver and detention system is constructed near the end of the project.

7.1 General Water Quality Detention Components. All drain pipes, observation wells, overflow pipes, geotextiles, and (if applicable), berms, baffles and impermeable liner systems should be in place per the drawings prior to or during placement of the aggregate subbase and base, depending on their location and subgrade conditions encountered.

(a) Stockpile joint/opening filler, base and subbase materials such that they are free from standing water, uniformly graded, free of any organic material, sediment or debris.
   - No mud or sediment can be left on the base or bedding aggregates. If they are contaminated, they must be removed and replaced with clean materials at the contractor's expense.

(b) Do not damage drainpipes, overflow pipes, observation wells, or any inlets and other drainage appurtenances during installation. Report any damage immediately to the Engineer and inspector.

(c) A perforated PVC underdrain system will be required. The horizontal and vertical locations shall be determined by the design engineer, depicted on the drawings, and be in general accordance with the MSD Permeable Interlocking Concrete Pavement detail.

(d) Observation wells should be provided in low areas within the permeable pavement system and shall extend to the bottom of the storage bed.

7.2 Site Preparation. Preparation of the site and materials shall include, but are not limited to, the following:

(a) General. Any excess thickness of soil applied over the excavated soil subgrade to trap sediment from adjacent construction activities shall be removed before application of the geotextile and geomembrane liner system materials.
   - Keep area where pavement is to be constructed free from sediment during entire job.

(b) Subgrade Soil Preparation. The preparation of the soil and/or base material may be necessary with weak or continually saturated soils, or when subject to high wheel loads.

Compaction will reduce the permeability of soils. If soil stability remediation is required, the contractor shall consult the engineer and geotechnical engineer for recommendations how to proceed since compacted soils may reduce infiltration.

- The prepared subgrade soil shall be dry.
- Subgrade should normally be compacted to a minimum density of 90% to 95% of the theoretical density per AASHTO T 180, or as recommended by the geotechnical engineer.
- If the underlying soils are plastic or plastic soils that have been stabilized with lime, the Engineer must be notifier to confirm drainage/infiltration capacity and if the underdrain system will not be perched.

(c) Excavation. The excavation for the detention shall be made with vertical edges. If conditions exist which prevent this, the Engineer shall be notified immediately.

- Subgrade excavation should be flat, and where topography requires, terracing of the subgrade may be allowed, as approved by the engineer.

7.3 Geotextile and Geomembrane Liner System Construction.

(a) Do not proceed with installation of geotextile, geomembrane liner, bedding and interlocking concrete pavers until subgrade soil conditions are corrected by the General Contractor or designated subcontractor.

(b) Geotextile Installation. The soil subgrade shall be covered with MSD Type 4 filter fabric on all vertical sides and bottom of the typical section.

- At a minimum, the fabric shall extended into the base layer.

(c) Geomembrane Liner System Installation. Where needed, a geomembrane shall be placed to interrupt an area of hydraulic connectivity to an adjacent feature or trench or to create a check dam within the subbase stone.

- The geomembrane liner shall be fully supported, and span the feature, extending a minimum of 2 feet beyond to create a hydraulic barrier.
- The contractor shall take care to ensure the geomembrane liner remains in contact with adjacent clay soils. All fabric wrinkles, rock and/or debris shall be removed to provide this continuous contact.
- When a pipe must penetrate the geomembrane liner, the contractor shall weld the liner to the pipe using manufacturer recommendations.

7.4 Aggregate Subbase Construction.

(a) Do not proceed with installation of subbase stone until subgrade soil conditions geotextile/geomembrane liner installation are corrected by the General Contractor or designated subcontractor.

(b) The aggregate shall be installed in layers above and around the geotextile and geomembrane liner to prevent tearing, ripping or distortions of the fabric.

(c) The underdrain system, complete with cleanouts, observation wells and all connections shall be installed in the aggregate subbase construction.

7.5 Permeable Paver Construction.

(a) Do not proceed with installation of bedding and interlocking concrete pavers until subgrade soil and subbase conditions are corrected by the General Contractor or designated subcontractor.

(b) Installation of base stone, bedding stone, permeable pavers and opening and joint filler stone shall be in accordance with MSD's Provisional Use Levels (PUL) and permeable paver's recommendations.

- Lay the paving units in the pattern(s) and joint widths shown on the drawings. Maintain straight pattern lines.

- Bond lines for paver courses: ±½ in. over a 50 ft string line.
- Fill gaps at the edges of the paved area with cut units. Cut pavers subject to tire traffic shall be no smaller than 1/3 of a whole unit.
- Cut pavers and place along the edges with a [double-bladed splitter or] masonry saw.
- Fill the openings and joints with ASTM No. 8 stone.
  - Note: Some paver joint widths may be narrow and not accept most of the No. 8 stone. Use joint material that will fill joints such as washed ASTM No. 89 stone, as approved by the manufacturer.

(c) The final surface tolerance of compacted pavers shall not deviate more than ±3/8 in. under a 10 ft (3 m) long straightedge.
(d) Lippage: No greater than 1/8 in. (3 mm) difference in height between adjacent pavers.
(e) The surface elevation of pavers shall be 1/8 to 1/4 in. above adjacent drainage inlets, concrete pavements, concrete collars or channels to maintain drainage patterns.
(f) The surface surface to adjacent surface elevations shall not exceed 1/4 in. height difference to maintain ADA compliance.

7.6 Permeable Pavement Notification and Maintenance.

(a) The Contractor shall prevent and divert sediment from entering the subbase, base, leveling course and pavement surface until the tributary areas are deemed stable by the construction inspector.
(b) Vehicular traffic shall be prohibited on the PICP until the site is stable to prevent mud from being deposited by vehicles.
(c) Do not clean the paver surface with high-pressure hoses or abrasives. When cleaning is necessary, combination cleaning machines that combine a wet spray and vacuum process have been found to be effective.
(d) Permanent sign(s) shall be posted warning that care should be taken during snow plowing; and prohibit the following: resurfacing, the use of sand abrasives for winter tire traction, and the use of power washers.

8.0 Acceptance and Verification of Site Conditions. The elevations and surface tolerance of the soil subgrade determine the final surface elevations of concrete pavers. The paver installation contractor cannot correct deficiencies, excavation and grading of the soil subgrade with additional bedding materials. Therefore, the surface elevations of the soil subgrade should be checked and accepted by the General Contractor, or designated party, with written certification presented to the paver installation subcontractor prior to starting work.

8.1. General Contractor shall inspect, accept and certify in writing to the paver installation subcontractor that site conditions meet specifications for the following items prior to installation of interlocking concrete pavers:

(a) Verify that subgrade preparation, compacted density and elevations conform to specified requirements.
(b) Provide written density test results for soil subgrade to the Owner, Engineer and paver installation subcontractor
(c) Verify location, type, and elevations of edge restraints.

9.0 As-Built Certification. At completion of the project, prior to final dedication and acceptance for maintenance, an as-built certification, signed and sealed by a Missouri Professional Engineer, shall be provided certifying:

(a) The PICP system was built in accordance with the details, dimensions, and materials as approved by MSD for this project.

(b) The PICP system was installed by a qualified contractor and has satisfied all applicable quality control and performance tests.
(c) The PICP system installation was witnessed by the certifying engineer or a representative under his direct supervision.

10.0 Method of Measurement. The method of measurement for permeable interlocking concrete pavement, installed, shall be as follows:

(a) Permeable interlocking concrete pavement shall be measured to the nearest square yard of paver installation. It shall include all the necessary pavers, bedding stone, base stone, geotextile, drainage piping, connections, cleanouts and any other necessary items needed for a complete system with exception of the item noted below. All necessary equipment, labor, hauling and any other items needed to install the PICP shall be included.
(b) PICP subbase stone shall be measured to the nearest cubic yard of aggregate installed. It shall include all necessary aggregate, equipment, labor, hauling and any other necessary items needed to install the PICP subbase stone.
(c) Geomembrane Liner System shall be measured to the nearest square yard of system installation. It shall include all the necessary geomembrane and geotextile materials, equipment, labor, hauling and any other necessary items needed for a complete system.

11.0 Basis of Payment. All costs for coordination, materials, equipment, labor, removal, hauling, and any other incidentals to construct a fully-functioning permeable interlocking concrete pavement system shall be included in the cost for the below items. The accepted quantity will be paid for at the contract unit price for items:

Item No.	Unit	Description
502-99.05(B)	SQYD	Permeable Interlocking Concrete Pavement
304-99.07	CUYD	PICP Subbase Stone
624-99.05	SQYD	Geomembrane Liner System

Required excavation for PICP installation will be paid for at the contract unit price for Class 3 Excavation. Underdrain system, and base course and bedding course will not be measured separately for payment, but shall be considered incidental to the Permeable Interlocking Concrete Pavement.

One (1) layer of geotextile fabric material shall be included and considered incidental to the Permeable Interlocking Concrete Pavement installation.

One (1) layer of geotextile fabric and one (1) layer of geomembrane liner material shall be included and considered incidental to the Geomembrane Liner installation. If site conditions require a second layer of geotextile fabric material to create a complete geomembrane liner system, this second layer of geotextile fabric shall be considered incidental to the Geomembrane Liner installation.

T. Sewer Lateral Adjustments/Relocations

1.0 Verification of Sewer Laterals. The contractor is advised there are several house sewer laterals crossing the limits of the proposed storm sewer pipe and structures along Market Street. The depth and location of these sewer laterals is unknown.

The contractor is responsible for determining the locations of the sewer laterals. The contractor shall then verify the location and depth of the sewer laterals for the buildings adjacent to the pipe work before starting any excavations to install the proposed storm pipe and structures. See for Potholing for Utility Facilities. The costs for this work shall be paid to the contractor at the price listed in the contract for the following bid item:

Item Number	Description	Unit
901-99.02(A)	Pot Holing for Utility Facilities	Each

2.0 Sewer Lateral Conflicts. The contractor shall notify the engineer for the project about any house sewer laterals found to conflict with the installation of the proposed storm drainage pipe and structures. The engineer will review the depth and location of the sewer lateral and determine whether any adjustments can be made to the proposed storm drainage to resolve the conflict with the sewer lateral. Any sewer lateral determined by the engineer to conflict with the proposed storm drainage shall be adjusted/relocated by the contractor to be clear of conflict. The contractor is responsible for obtaining all permits needed to adjust/relocate the sewer lateral. All work to adjust/relocate the sewer lateral shall be done according to the standards, specifications, and requirements of the Rock Creek Public Sewer District, City of Kimmswick, and Jefferson County.

3.0 Payment for Sewer Lateral Adjustments/Relocations. The costs for all removals, materials, permits, shoring, excavation, installation, backfill, and all other items of material or work not listed that shall be considered incidental and necessary to adjust/relocate the sewer lateral pipe found in conflict with the proposed storm drainage pipe and structures, shall be paid for at the unit price listed in the contract for the following bid item:

Item No.	Description	Unit
603-99.22	Sewer Lateral Adjustments/Relocations	Each

U. Decorative Fence

1.0 Description. This work shall consist of furnishing and installing decorative fencing at location shown in the plans.

2.0 Materials. Fence material selected shall match the color, material, and type of fence being replaced. Fence material shall be approved by the County prior to installation.

3.0 Method of Measurement. The measurement for decorative fence shall be measured by linear foot of fence installation. It shall include all necessary foundations, posts, fence material, gates, latches and any other necessary items needed to install fence.

4.0 Basis of Payment. This work will be paid for at the contract unit price for item:

Item No.	Unit	Description
607-99.03	LF	Decorative Fence

V. Paver Gutter

1.0 Description. This work shall consist of furnishing and installing interlocking concrete pavers to form a gutter at locations shown in the plans.

2.0 Contractor Submittals to Engineer. The following shall be submitted and approved by the Engineer prior to the implementation of the material during construction, unless otherwise noted:

2.1 The Contractor shall provide verification that the installing contractor who will be responsible for constructing the paver gutter will provide the as-built certification which includes:

(a) Past history demonstrating applicable experience.
(b) The Paver Gutter installation contractor must be a current certified concrete pavement installer through the Concrete Masonry and Hardscapes Association.

2.2 The Contractor shall submit subcontractor's drawings and details for paver installation prior to construction which may include:

(a) Indicate perimeter conditions, junction with other materials, expansion and control joints, paver layout and pattern(s), and installation details.
(b) Indicate layout, pattern and relationship of paving joints to fixtures, and project formed details.
(c) Method Statement and Quality Control Plan that describes material staging and flow, paving direction and installation procedures.

2.3 To ensure design criteria are met, a mock-up shall be constructed. The Contractor shall submit the following for approval:

(a) Proposed concrete paver selection for use in mock-up with a minimum size of 2' wide by 4' long.
- Four representative full-size samples of each paver type, thickness, color, and finish. The representative samples shall indicate the range of color expected in the finished installation.
- The mock-up should be built in a designated area on site. This area shall be used to determine joint sizes, and lines, laying pattern, color and texture of the job and used as the standard by which the work will be judged. The mock-up is subject to the acceptance by the Owner and may be retained as part of the finished work. If the mock-up is not retained, it shall be removed and properly disposed of.

2.4 Informational Submittals.

- Material Certificates: For unit pavers. Include statements of material properties indicating compliance with requirements, including compliance with standards. Provide for each type and size of unit.

2.5 Field Conditions.

- Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

2.0 Material and Construction Requirements.

2.1 Concrete Pavers for Paver Gutter

- Solid interlocking paving units complying with ASTM C 936/C 936M and resistant to freezing and thawing when tested according to ASTM C 67, made from normal-weight aggregates.
- Pavers shall be Standard Series, Rectangular Pavers.
- Thickness: 3 1/8 inches.(80 mm)
- Face Size and Shape: 4-by-8-inch rectangle.
- Color: light beige / light brown blends
- Pattern: Running Bond pattern
  - Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - Romanstone Hollandstone, Classic Paver/ Bethany Ledge Blend
  - Unilock Hollandstone, River Blend
  - Belgard Commercial Concrete Hollandstone Pavers, Burnt Amber

2.3 Concrete Base Material

Pavers for paver gutter shall be set in 5" depth concrete base at slopes specified in the plans. Concrete mix shall have low slump sufficient to hold pavers and achieve gutter slopes specified in the plans. Concrete mix for paver gutter base shall conform to Section 608.

3.0 Execution.

3.1 Installation, General

Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.

Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable. For concrete pavers, a block splitter may be used.

Retain a running bond pattern as indicated on the drawings.

Tolerances: Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and 1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.

Expansion and Control Joints: Provide for sealant-filled joints at locations and of widths indicated. Provide compressible foam filler as backing for sealant-filled joints unless otherwise indicated. Install joint filler before setting pavers.

3.2 Setting-Bed Applications

Compact soil subgrade uniformly to at least 95 percent of ASTM D 698 laboratory density. Place aggregate base, compact by tamping with plate vibrator, and screed to depth indicated. Place concrete base, per depth indicated.

Set pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.

3.0 Method of Measurement. The measurement for paver gutter shall be measured by linear foot of gutter installation. It shall include all necessary pavers, concrete base, equipment, labor, hauling and any other necessary items needed to install the paver gutter.

4.0 Basis of Payment. This work will be paid for at the contract unit price for item:

Item No.	Unit	Description
609-99.03(B)	LF	Paver Gutter

W. Small Block Wall

1.0 Description. This work shall consist of designing, furnishing, and erecting modular block retaining walls, as shown on the plans, according to Section 720 of the Standard Specifications, and per the requirements of the wall manufacturer.

2.0 Materials. Wall System selected shall be listed on MoDOT's Bridge Pre-qualified Products List (BPPL) and approved by the Engineer.

3.0 Submittals. Shop drawings are required for each wall to be constructed. Design of the walls shall follow the MoDOT Engineering Policy Guide and the requirements of the wall manufacturer. The Contractor shall complete any additional geotechnical investigations required for the design of each wall.

4.0 Construction Requirements. Maximum-stacked vertical height of wall units, prior to wall drain fill and backfill placement and compaction, shall be as recommended by the wall supplier and stated in the shop drawings. Actual limits of the granular backfill shall be determined by the Contractor and the wall manufacturer.

5.0 Basis of Payment. This work will be paid for at the contract unit price for item:

Item No.	Unit	Description
720-99.04	SQFT	Small Retaining Block Wall

1 REVISED X. Group A Pipe Material

1.0 Description. This work covers the furnishing, labor, and equipment required to install storm sewer pipe at the locations designated on the construction plans. Refer to the construction plans for specific quantities and locations. All work shall meet the requirements of the Missouri Standard Specifications for Highway Construction unless otherwise noted herein.

2.0 Construction Requirements. Only the following two (2) types of pipe culvert will be acceptable for Group A pipe: Rigid Pipe (Reinforced Concrete Culvert Pipe) or Thermoplastic Flexible Pipe (Double or Triple Wall Polypropylene Pipe). Vitrified Clay Pipe, Metal Flexible

Pipe, Polyvinyl Chloride Pipe (PVC), or Polyethylene Pipe are not acceptable for use under the Group A Pipe category for this project.

3.0 Basis of Payment. All work required as described above for pipe as designated on the plans, complete in place, will be included in the cost for the contract unit price for the following pay item:

Item No.	Unit	Description
726-10.12	LF	12 IN. Pipe Group A
726-10.15	LF	15 IN. Pipe Group A

Y. Downspout Drain Pipe Adjustment

4.0 Description. This work shall consist of furnishing, installing, and adjusting building downspout drain pipes at locations specified in the plans and as needed during construction. There are locations within the project area where downspout drain pipes from privately owned buildings outlet within public ROW. Where these drain pipes will be impacted by construction activities, they must be adjusted or replaced in kind to allow for positive drainage away from structures.

5.0 Materials. If downspout drain pipes need replacement, pipe material selected shall match the color, material, and type of pipe being replaced. Pipe material shall be approved by the County prior to installation.

6.0 Construction Requirements. Adjusted or replaced downspout outlets shall drain over the sidewalk unless otherwise noted in the plans. Downspouts shall drain away from structures so that water does not pool or flow against building foundations.

7.0 Method of Measurement. The measurement for downspout drain pipe shall be measured by linear foot of pipe adjustment and installation. It shall include all necessary materials, labor, and equipment necessary for providing functioning downspout drainage with positive drainage.

8.0 Basis of Payment. This work will be paid for at the contract unit price for item:

Item No.	Unit	Description
726-99.03	LF	Downspout Drain Pipe Adjustment

Z. Inverted Cradle for Water Main Protection

1.0 Description. This work will consist of installing an inverted cradle with a steel plate for bridging the existing PWSD #10 water main under three proposed drainage structures at locations shown in the plans.

2.0 Materials. Concrete for inverted cradle supports shall be in accordance with Section 703. Reinforcing steel for inverted cradle supports shall be in accordance with Section 706.

3.0 Construction Requirements. See detail in the Special Sheets for layout and dimensions. The contractor shall notify PWSD #10 48 hours in advance of installing inverted cradles. Contact information can be found the Utilities JSP.

4.0 Basis of Payment. No direct payment will be made for construction of the inverted cradles. All materials, labor, and equipment required for the construction of the inverted cradles shall be considered incidental to the cost of Precast Concrete Drop Inlet 2 FT X 2 FT.

AA. Single Inlets

1.0 Description. This work covers the furnishing and installation of MSD standard single street inlets and tops as shown in the plans and details.

2.0 Material. Material for the single street inlets shall be as specified in the Metropolitan St. Louis Sewer District Standard Construction Specifications for Sewers and Drainage Facilities, latest edition.

3.0 Construction Requirements. The single street inlets are MSD standard drainage structures and shall be constructed in accordance with the latest Missouri Standard Specifications, Section 731 and as detailed in the Metropolitan St. Louis District Standard Detail Sheets, latest edition.

4.0 Method of Measurement.

4.1 Measurement of Single Street Inlets shall be the difference in feet from the top of the inlet stone to the low flowline of the inlet, as shown in the Culvert Section Plan Sheets and shall also include the inlet sill, stone and cover and pipe joints as required by MSD's Standard Construction Specifications Section H.

4.2 Excavation for all structures is paid for separately as Class 3 Excavation. See plans for quantities.

5.0 Basis of Payment. The contract unit price shall be considered as full compensation for all labor, equipment, materials, or other construction involved to complete the work. No direct pay for reinforcement, steps, inlet sill, stone, mortar, dowels, pipe joint material, granular backfill, cover or other incidental items necessary to complete this work. The following is the Pay Item No. for the single street inlet.

Pay Item Number	Description	Unit
614-99.02	Single Street Curb Inlet Top	Each
731-99.13	Single Street Inlet	Vertical Linear Foot

BB. Adjust To Grade Items

1.0 Description. This work shall consist of adjusting water valves, water meters, basins/inlets, and manholes that are within areas where either new sidewalks, curb ramps, approaches or pavements are to be constructed as shown on the plans. The contractor shall verify the type of frame and cover in the field before performing the work. The adjustments shall be made to match the final proposed grade.

2.0 Construction Requirements. Adjusting manholes and adjusting basins or inlets shall be done in accordance with Sec 604 except as modified herein.

2.1 Adjustments, extensions, and/or lowering of utility and any related excavation and backfill shall be constructed as approved by the Engineer. For County owned facilities, adjustments shall conform to current Missouri Standard Specifications for Highway Construction. Adjustments for inlets require the top lid slopes to be adjusted to less than 2% slope in all directions and some of these inlets need to be raised to the final sidewalk grade. These are called out in the plans as "adjust inlet top". Adjustments shall be completed so that the finished sidewalk, ramp, approach, or pavement meets current ADA standards.

3.0 Basis of Payment.

3.1 All costs for materials, equipment, labor and installation shall be included in the cost for adjusting the water valves, water meters, basins/inlets, manholes, and pull boxes.

Pay Item Number	Description	Unit
603-99.02(A)	Adjust to Grade Water Valve	Each
603-99.02(B)	Adjust to Grade Water Meter	Each
604-20.10	Adjusting Manhole	Each
604-20.20	Adjusting Basin or Inlet	Each

CC. Landscaping Restoration

1.0 Description. This work shall consist of restoring existing landscaped areas that are disturbed by construction activities as shown on the plans or as directed by the Engineer.

In "cut" areas, the existing landscape material (decorative rock, mulch, etc.), fabric and vegetation shall be removed within the grading limits and then the existing ground shall be cut to grade. After the existing ground is cut to grade, the existing fabric, vegetation, and landscape material shall be placed back in their original locations as directed by the Engineer.

In "fill" areas, additional "in-kind" landscape material shall be added to the existing landscape material to bring it up to the proposed grade as directed by the Engineer. Existing vegetation may need to be removed and replanted to bring it up to proposed grade as directed by the Engineer.

Any existing landscape material, fabric or vegetation damaged by the Contractor during construction shall be replaced "in-kind" at his/her expense as directed by the Engineer.

2.0 Method of Measurement and Basis of Payment. Landscaping restoration will be measured and paid for at the unit bid price per square yard. Payment will be considered full compensation for all labor, equipment and material to complete the described work. All expense incurred by the contractor in compliance with the above requirements shall be considered as completely covered by unit prices for:

Item Number	Description	Unit
803-99.05A	Landscaping Restoration	S.Y.

DD. Compost Filter Sock

1.0 Description. This work shall consist of furnishing and installing compost filter socks (commonly referred to as wattles) in lieu of traditional silt fence for erosion and sediment control in accordance with the plans, these provisions, and Section 806 of the Missouri Standard Specifications for Highway Construction.

2.0 Material. Compost filter socks shall consist of a mesh tube filled with composted material or clean natural fibers (such as straw) meeting the requirements of Section 806 and the requirements of AASHTO R51.

2.0 Construction and Maintenance Requirements. Compost Filter Socks shall be installed at locations shown on the plans. The engineer may also modify the location as necessary to improve the effectiveness of the compost filter sock. The contractor shall monitor the condition of all filter socks and repair or replace any that are not functional as long as they are necessary to contain sediment runoff. Any deficiencies shall be corrected by the contractor in accordance with the SWPPP. In addition, the contractor shall review the effectiveness of compost filter socks in areas where construction activities have changed the natural contour and drainage runoff. Where deficiencies exist, additional filter socks shall be installed as approved or directed by the engineer

2.0 Method of Measurement and Basis of Payment. Measurement will be by linear foot of installed compost filter sock. Payment will be considered full compensation for all labor, equipment and material to complete the described work. All expense incurred by the contractor in compliance with the above requirements shall be considered as completely covered by unit prices for:

Item Number	Description	Unit
806-99.03	Compost Filter Sock	L.F.

EE. Pedestrian Lighting

1.0 Description. This provision covers the items listed below, consisting of furnishing and installing light poles, luminaires, and pole foundations as indicated in the lighting plans.

- Light Pole: Pole shall be Valmont Structures 12’ Washington Fluted Round Non-Tapered Aluminum Post in black with breakaway banner arms, tenon mount bracket, and integrated GFCI receptacle. Model #WA17AS120040404UW

- Luminaire: Fixture shall be Sternberg Lighting LED Avenue Luminaire with Type III distribution in black. Model #PT-B750SRLED-5P-24L40T3-MDL014

- Foundation: Pole foundation shall be Concrete Pole Foundation with 5’ minimum depth and 24” diameter, as detailed in the plans.

2.0 Materials. All materials and work shall conform to Section 901 of the Missouri Standard Specifications for Highway Construction, 2025.

3.0 Shop Drawing Requirements. Contractor shall submit shop drawings for the post and luminaire materials. These drawings shall be reviewed with “No Exceptions” by the Engineer prior to ordering the equipment.

4.0 Method of Measurement. Measurement for these items shall be per each.

5.0 Basis of Payment. Payment will be considered full compensation for the excavation, labor, mounting hardware, and material necessary for installation and full functionality of these items and shall be included under the contract unit price for each item defined below:

Item Number	Item Name	Units
901-99.02(B)	12 FT. Decorative Pedestrian Light Pole	Each
901-99.02(C)	Decorative Pedestrian LED Luminaire	Each
901-99.02(D)	Concrete Pole Foundation	Each

FF. Pad Mounted 120/240 VOLT Combination Power Supply and Lighting Controller with Auxiliary Circuits for GFCI Outlets

1.0 Description. This work shall consist of furnishing and installing a pad mounted 120/240-volt single-phase, multi-circuit, combination power supply, lighting control system and Ground Fault Circuit Interrupter (GFCI) protected receptacles integrally mounted in the light poles for temporary and festival use. The unit shall distribute power for site lighting and auxiliary loads, including vendor equipment, event infrastructure, while meeting all applicable electrical codes and project specifications. The installation shall include all necessary equipment, wiring, conduit, grounding, and protective devices to ensure safe and reliable operation under outdoor conditions.

The provided product shall conform to the lighting section of the MoDOT approved products list under Pad Mounted Lighting Controllers, with modifications contained herein. The combination power supply and lighting controller with integrated pole-mounted GFCI outlets shall be installed in accordance with the plans and by direction of the engineer.

2.0 Materials. The contractor shall furnish all materials necessary for installation of the pad-mounted combination power and lighting control system. Materials shall meet the following requirements.

2.1 Pad Mounted Enclosure Cabinet. The cabinet shall meet the following requirements:

(a) The cabinet shall be aluminum or stainless steel meeting the requirements for a NEMA 3R rated, dust-tight, watertight, lockable cabinet.
(b) All hardware, hinges, catches, etc. shall be stainless steel and tamper-resistant.
(c) Cabinet size shall be increased as necessary to meet spacing requirements.
(d) Meter socket and other equipment and materials shall be U.L. approved conform to the requirements of the utility company providing power.
(e) The cabinet and accessories shall be factory powder coated per the included specifications.

2.2 Power Supply. The enclosure shall utilize a single utility meter and provide 120/240 volt, single phase distribution panel(s).

(a) The lighting circuits shall utilize 240 volt and include a 100 amp main breaker.
(b) The auxiliary GFCI outlet circuits shall utilize 120 volt and include a 400 amp main breaker.
(c) Lightning protection shall be provided for all equipment.

2.3 Lighting Controller and Load Center. The lighting controller shall include the items specified in the drawings including photocell-based control with a manual override. The lighting load center shall be able to utilize four (4) lighting circuits.

2.4 Auxiliary GFCI Outlet Load Center. A load center with 20-24 circuit spacings for 15 amp breakers. A minimum of two (2) 15 amp GFCI Outlets shall be mounted in a lockable receptacle enclosure separate from the main control system.

2.5 Wiring. All wiring shall comply with National Electrical Code (NEC) requirements and shall include copper conductors, THWN or THWN-2 insulation.

2.5 Conduit. All conduit material and sizes shall conform to MoDOT standards, unless otherwise noted.

2.6 Grounding. All ground rods and bonding conductors shall meet NEC requirements. All metallic components shall be bonded to the grounding system.

3.0 Construction Requirements. Construction requirements shall conform to MoDOT Section 902. The contractor shall include, but not be limited to, the following:

(a) Install conduits per MoDOT standards.
(b) Install pad-mounted enclosure on a concrete pedestal with attachments as recommended by the manufacturer.
(c) Provide proper clearances for access and maintenance.
(d) Terminal all conductors per NEC specifications.
(e) Label circuits for lighting and receptacle load.

3.1 Shop Drawing Requirements. Contractor shall submit shop drawings for the material and a drawing which shows the layout of the equipment in the enclosure. These drawings shall be reviewed with “No Exceptions” by the Engineer prior to ordering the equipment.

3.3 Testing. Contractor shall perform the following:

(a) Verify voltage and amperage at the main breaker and branch circuits.
(b) Test GFCI outlets for proper operation.
(c) Confirm lighting controller operation (photocell and manual override).
(d) Any additional testing or warranty items as normally required by MoDOT.
(e) Submit test results to the engineer.

3.4 Powder Coating of Equipment. This specification covers a powder coating finish for metallic components.

3.4.1 Basis of Acceptance. Basis of acceptance of the powder coated components will be based on a manufacturer's certification, including certified test results for all performance requirements, submitted by the contractor and upon results of any tests performed by the engineer. The contractor shall repair any areas damaged during the testing process by a written method of repair recommended by the powder coating manufacturer. all repairs shall be subject to the engineer's approval.

3.4.2 Material.

(a) The finished powder coating shall be “black in color.”
(b) The powder coating shall be a urethane or triglycidyl isocyanate (tgic) polyester resin type.

(c) Galvanizing. When galvanizing is specified, all surfaces of the component shall be galvanized prior to powder coating in accordance with ASTM A 123. components shall not be water or chromate quenched prior to powder coating.

- The procedure for determining the mass of coating shall be in accordance with ASTM A 90. This method shall be used in cases where the area of the test specimen can be accurately tested. on specimens shaped so that the area cannot be calculated, the mass of coating shall be determined with a magnetic gauge in accordance with ASTM E 376. the powder coating shall be removed by solvent removal or other any other method that does not affect the zinc coating.

3.4.4. Workmanship.

(a) Fabrication. After fabrication of the component, all welds, bolted connections, holes, cut ends, etc. shall be free of slag, burrs or other imperfections that would affect the overall appearance or performance of the finished product.

(b) Finish of Galvanized Components. When galvanizing is required prior to powder coating, all galvanized surfaces shall be in accordance with the finish and appearance requirements of ASTM A 123 prior to application of the powder coating. prior to powder coating, all surfaces shall be free of uncoated areas, blisters, flux deposits, gross dross inclusions, lumps, globules, runs, drips and sags. Zinc high spots, such as metal drip line, and other rough areas shall be removed by cleaning with hand or power tools as described in SSPC Surface Preparation Specification 2 or 3. The zinc shall be removed until the zinc is level with the surrounding area, taking care that the base coating is not removed by the cleaning methods. The final galvanized surface shall be an applicable substrate to ensure proper adhesion of the powder coating. after removal of high spots and other rough areas, the coated surface shall be inspected to verify the required zinc coating thickness is in accordance with ASTM A 123 utilizing a magnetic field type thickness instrument in accordance with ASTM E 376. Any component that does not comply with the zinc coating thickness requirement before or after removal of high spots or rough areas shall be repaired in accordance with ASTM A 780.

(c) Finish of Powder Coating. The powder coated surface shall be smooth, free of thin spots, pinholes, blemishes, and other coating imperfections.

(d) Powder Coating Application. The powder coating shall be applied in accordance with all requirements of the supplier of the powder coating material. When powder coating is to be applied over galvanized surfaces, the powder coating application shall also be in accordance with the requirements supplied by the galvanizer. This shall include storage and pre-treatment of the component prior to application of the powder coating. If there is a conflict in application method between the powder coating supplier and the galvanizer, the powder coater shall resolve the conflict prior to application of any powder coating.

3.4.5. Performance Requirements. The finished components shall be delivered to the project site with no damage to the powder coating. The contractor shall repair any damaged areas in accordance with the requirements of the powder coating manufacturer at the engineer's discretion. Damage to the powder coating may be cause for rejection.

(a) The powder coating of the finished components shall be in accordance with the following requirements:

- Salt spray corrosion, 500 hr, single scribe ASTM B 117 creepage shall not exceed ¼" in either direction from scribe.
- Cross hatch adhesion, min ASTM D 3359 5A and 5B.
- Pencil hardness, gouge, min ASTM D 3363 F.
- Pencil hardness, scratch, min ASTM D 3363 F.

- Coating thickness, mils, min a ASTM E 376 3.0.
- Gloss, 60°, min ASTM D 523 20.
- Chemical resistance B ASTM D 1308 coating shall show only a slight circular mark.

(b) For components with an underlying non-magnetic coating over steel, the powder coating thickness will be the difference in thickness measurements with and without the powder coating.

(c) The open spot test shall be performed with 5 drops 95% toluene / 5% MEK for 30 s.

4.0 Method of Measurement. Method of measurement shall conform to MoDOT Section 902.

5.0 Basis of Payment. Payment for furnishing and installing pad mounted units shall include all excavation, concrete, reinforcement/anchor bolts, powder coating, additional materials, equipment, tools, labor, and work incidental thereto, and shall be considered to be completely covered by the contract unit price for the following:

Item Number	Item Name	Unit
901-99.02(E)	Pad Mounted 120/240 Volt Combination Power Supply and Lighting Controller with Auxiliary Circuits for GFCI Outlets	Each

If it is determined that the cabinet size must be increased from minimum dimensions shown on the details, no additional costs shall be increased as necessary to meet spacing requirements at no additional cost.

GG. Pot Holing Utility Facilities

1.0 Description. The contractor shall field verify that all proposed light poles, sign posts and roadway drainage structure locations (inlets, manholes or pipes) will not need to be shifted to avoid utilities prior to ordering any necessary light poles, sign posts, or drainage structures. The contractor shall be proactive in the discovery of potential utility conflicts. The contractor shall submit One Call tickets where existing utilities are located in close proximity to proposed improvements and coordinate with the utility company and the engineer to determine if a conflict will be encountered due to the work proposed in the contract. If a conflict is anticipated, the contractor shall perform test holes to field verify whether conflicts exist with proposed roadway improvement locations.

If utility facilities are discovered the contractor shall contact the Utility Coordinator (Crawford, Murphy & Tilly, Inc. Design Consultant), Matt Ottsen at (314) 437-0858. The engineer will determine whether relocation of the utility is necessary to accommodate construction or if the work can be installed in accordance with Missouri Standard Plans for Highway Construction for the item of work specified. The contractor shall coordinate construction activities with the utilities and take measures to ensure the integrity of the existing facilities are not disturbed during construction.

The contractor shall not order materials until measurements are field verified.

2.0 Basis of Payment.

2.1 All labor, equipment, materials, and restoration necessary to pothole buried utilities at proposed light poles, sign posts and drainage structure (inlets, manholes or pipes) locations shall be paid for under:

Item Number	Description	Unit
901-99.02(A)	Pot Holing For Utility Facilities	Each

HH. Permanent Signing

1.0 Description. This work shall consist of furnishing and installing the highway signing as shown on the plans. All work shall be in accordance with Section 903 of the Missouri Standard Specifications for Highway Construction except as modified herein.

2.0 Method of Measurement. The measurement for Permanent Signing shall be measured by each installation of sign. It shall include all necessary foundations, posts, breakaway assemblies, anchors, brackets, sign sheeting and any other necessary items needed to install the signs in accordance with the plans, specifications and standard drawings for Section 903.

3.0 Basis of Payment. Payment for the furnishing and installing permanent signing including all labor, equipment, materials and time will be made in accordance with the contract unit bid price for item:

	Pay Item Number	Unit
903-99.04	Permanent Signing	SF

II. Remove and Relocate Existing Ground Mount Sign

1.0 Description. This item provides for relocating and mounting existing signs and those identified as “special”, including any existing backing bars, of various sizes to new posts at locations shown on the plans. The Contractor shall be responsible for all existing signs, including any existing backing bars, to be relocated. During construction, if any sign, including any backing bars, to be relocated is lost, stolen, or damaged in any way, the Contractor shall be responsible for all costs.

2.0 Construction Requirements. The contractor shall install new sign support posts at the locations shown and then relocate and mount existing signs, including any existing backing bars, to the new posts. All work shall be in accordance with the construction requirements of Section 903.

3.0 Method of Measurement. Measurement will be made per each for relocating and mounting existing signs, including any existing backing bars, to new posts. It shall include all necessary foundations, posts, breakaway assemblies, anchors, brackets and any other necessary items needed to install the signs in accordance with the plans, specifications and standard drawings for Section 903.

4.0 Basis of Payment. All costs incurred for relocating and mounting existing signs, including existing backing bars, to new posts at the locations shown, complete in place, will be paid for at the contract unit price for:

Item No.	Description	Unit
903-99.02(A)	Remove and Relocate Existing Ground Mount Sign	Each
903-99.02(B)	Remove and Relocate Existing Ground Mount Sign Special	Each

4.1 Payment for all other labor, equipment, material, and incidental items will be considered completely covered by the bid items included in the contract.

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	PARTICIPATING SUBTOTAL	NON- PARTICIPATING SUBTOTAL	TOTAL	REMARKS
202-20.10	REMOVAL OF IMPROVEMENTS	(LS)	1	-	1	
206-30.00	CLASS 3 EXCAVATION	(CUYD)	790	137	927	
207-99.09	LINEAR GRADING CLASS 2, MODIFIED	(STA)	16.8	4.3	21.1	
304-05.04	TYPE 5 AGGREGATE FOR BASE (4 IN. THICK)	(SQYD)	2,568	489	3,057	
304-99.07	PICP SUBBASE STONE	(CUYD)	378	42	420	
310-50.03	GRAVEL (A) OR CRUSHED STONE (B)	(SQYD)	140	4	144	
401-12.09	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)	(TONS)	138.6	38.7	177.3	
407-10.07	TACK COAT - NON TRACKING	(GAL)	129	36	165	
502-13.08	CONCRETE PAVEMENT (8 IN. NON-REINFORCED, 15 FT. JOINTS)	(SQYD)	49.5	1.7	51.2	
502-99.05(A)	CONCRETE PAVEMENT 7 IN. NON-REINFORCED (EXPOSED AGGREGATE)	(SQYD)	347.0	44.9	391.9	
502-99.05(B)	PERMEABLE INTERLOCKING CONCRETE PAVEMENT	(SQYD)	881.4	103.9	985.3	
603-99.02(A)	ADJUST TO GRADE WATER VALVE	(EA)	1	-	1	
603-99.02(B)	ADJUST TO GRADE WATER METER	(EA)	7	3	10	
603-99.22	SEWER LATERAL ADJUSTMENTS/RELOCATIONS	(EA)	6	-	6	
604-20.10	ADJUSTING MANHOLE	(EA)	3	-	3	
604-20.20	ADJUSTING BASIN OR INLET	(EA)	3	-	3	
604-40.13	PIPE COLLAR, TYPE C	(EA)	1	-	1	
607-99.03	DECORATIVE FENCE	(LF)	-	123	123	
608-10.12	TRUNCATED DOMES	(SQFT)	339	82	421	
608-50.07	PAVED APPROACH, 7 IN.	(SQYD)	114.1	31.8	145.9	
608-99.05(A)	CONCRETE CURB RAMP (EXPOSED AGGREGATE)	(SQYD)	2.5	19.1	21.6	
608-99.05(B)	CONCRETE SIDEWALK, 4 IN. (EXPOSED AGGREGATE)	(SQYD)	1,369.3	246.9	1,616.2	
608-99.05(C)	CONCRETE SIDEWALK, 7 IN. (EXPOSED AGGREGATE)	(SQYD)	286.1	47.3	333.4	
609-99.03(A)	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S (EXPOSED AGGREGATE)	(LF)	-	47	47	
609-99.03(B)	PAVER GUTTER	(LF)	1,776	432	2,208	
614-11.20	CURVED VANE GRATE AND FRAME (2 FT. X 2 FT.)	(EA)	11	3	14	
614-30.10	MANHOLE FRAME AND COVER, TYPE 1-A	(EA)	6	1	7	
616-10.98A	CHANGEABLE MESSAGE SIGN WITHOUT COMMUNICATION INTERFACE - CONTRACTOR FURNISHED AND RETAINED	(EA)	1	-	1	
616-99.01	LUMP SUM TEMPORARY TRAFFIC CONTROL	(LS)	1	-	1	
618-10.00	MOBILIZATION	(LS)	1	-	1	
622-10.01	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS)	(SQYD)	1,281	357	1,638	
624-99.05	GEOMEMBRANE LINER SYSTEM	(SQYD)	96	69	165	
627-40.00	CONTRACTOR FURNISHED SURVEYING AND STAKING	(LS)	1	-	1	
703-20.02	CLASS B CONCRETE (MISC.)	(CUYD)	4.2	-	4.2	
706-10.00	REINFORCING STEEL	(LBS)	210	-	210	
720-99.04	SMALL BLOCK RETAINING WALL	(SF)	118	-	118	
726-10.12	12 IN. PIPE GROUP A	(LF)	535	137	672	
726-10.15	15 IN. PIPE GROUP A	(LF)	52	40	92	
726-99.03	DOWNSPOUT DRAIN PIPE ADJUSTMENT	(LF)	85	10	95	
731-00.48	PRECAST CONCRETE MANHOLE - 48 IN.	(FT)	21	4	25	
731-10.22	PRECAST CONCRETE DROP INLET 2 FT X 2 FT	(FT)	33	9	42	
803-10.00A	TURF TYPE TALL FESCUE SODDING	(SQYD)	522	133	655	
803-99.05A	LANDSCAPING RESTORATION	(SQYD)	13	-	13	
806-10.07A	CURB INLET CHECK	(EACH)	13	4	17	
806-10.16	SEDIMENT REMOVAL	(CUYD)	104	35	139	
806-99.03	COMPOST FILTER SOCK	(LF)	902	304	1,206	
901-99.02(A)	POT HOLING UTILITY FACILITIES	(EA)	22	-	22	
903-99.02(A)	REMOVE & RELOCATE GROUND MOUNT SIGN	(EA)	2	-	2	
903-99.02(B)	REMOVE & RELOCATE GROUND MOUNT SIGN SPECIAL	(EA)	4	1	5	
903-99.04	PERMANENT SIGNING	(SF)	80	30	110	
ADD ALTERNATE A SUMMARY						
901-30.03	CONDUIT, 3 IN. RIGID, IN TRENCH	(LF)	3,300	-	3,300	
901-40.03	CONDUIT, 3 IN. RIGID, PUSHED	(LF)	82	-	82	
901-61.10	PULL BOX, PREFORMED CLASS 1	(EA)	17	-	17	
901-61.12	PULL BOX, PREFORMED CLASS 3	(EA)	2	-	2	
901-70.02	CABLE, 2 AWG 1 CONDUCTOR	(LF)	4,720	-	4,720	
901-70.04	CABLE, 4 AWG 1 CONDUCTOR	(LF)	4,870	-	4,870	
901-70.06	CABLE, 6 AWG 1 CONDUCTOR	(LF)	3,330	-	3,330	
901-70.08	CABLE, 8 AWG 1 CONDUCTOR	(LF)	8,310	-	8,310	
901-71.10	CABLE, 10 AWG 1 CONDUCTOR, POLE AND BRACKET	(LF)	610	-	610	
901-99.02(B)	12 FT. DECORATIVE PEDESTRIAN LIGHT POLE	(EA)	17	-	17	
901-99.02(C)	DECORATIVE PEDESTRIAN LED LUMINAIRE	(EA)	17	-	17	
901-99.02(D)	CONCRETE POLE FOUNDATION	(EA)	17	-	17	
901-99.02(E)	PAD MOUNTED $^{120}/_{240}$ VOLT COMBINATION POWER SUPPLY AND LIGHTING CONTROLLER WITH AUXILIARY CIRCUITS FOR GFCI OUTLETS	(EA)	1	-	1	

1	500	3,068
1	258.1	1,627.4
1	137	659

DISCLAIMER
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STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER

03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED
3/31/2026

STATE MO | SHEET NO. 3

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
725 MAPLE STREET
HILLSBORO, MO 63050
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CRAWFORD, MURPHY & TILLY, INC.
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102-2430 (314) 436-5500
ENGINEERING CORPORATION - 000631

QUANTITY SHEET
SHEET 1 OF 11

KIMMSWICK GREAT STREETS PHASE 1

REMOVAL OF IMPROVEMENTS - 1 LUMP SUM

PLAN SHEET	ROADWAY	STATION (FROM)	STATION (TO)	LOCATION	LENGTH (FEET)	AREA (SF)	AREA (SY)	EACH	DESCRIPTION OF REMOVAL	
1	MARKET	100+34.24	102+89.24	RT		1141.70			ASPHALT PAVEMENT	
1	MARKET	100+34.24	102+90.06	LT		2455.77			ASPHALT PAVEMENT	
1	MARKET	100+34.24	102+74.82	RT	240				ROLLED ASPHALT CURB	
1	MARKET	100+40.10	100+45.12	RT				1	CONCRETE STEP	
1	MARKET	100+54.82	101+12.95	RT		214.18			CONCRETE SIDEWALK	
1	MARKET	100+85.42	100+92.48	RT		49.90			LANDSCAPE PAVERS	
1	MARKET	102+72.45		RT				1	TREE	
1	MARKET	102+80.00	103+24.00	LT/RT		1147.36			ASPHALT PAVEMENT	
1	MARKET	102+81.50		LT					PEDESTRIAN BRIDGE	
1	MARKET	103+44.51	103+47.05	RT		7.49			CONCRETE SIDEWALK	
1	MARKET	103+49.49	104+41.19	LT		353.54			CONCRETE SIDEWALK	
1-2	MARKET	103+14.18	105+88.06	LT		2843.50			ASPHALT PAVEMENT	
1-2	MARKET	103+14.65	105+87.93	RT		2319.31			ASPHALT PAVEMENT	
2	MARKET	104+60.69	105+28.11	LT		232.55			CONCRETE SIDEWALK	
2	MARKET	104+90.30	105+01.25	RT		64.95			ASPHALT SIDEWALK	
2	MARKET	105+01.25	105+69.36	RT		405.33			CONCRETE SIDEWALK	
2	MARKET	106+11.94	108+83.72	RT		2177.49			ASPHALT PAVEMENT	
2	MARKET	106+12.06	108+86.12	LT		3559.54			ASPHALT PAVEMENT	
2	MARKET	106+16.79	106+82.48	RT		245.30			CONCRETE SIDEWALK	
2	MARKET	106+18.36	107+43.08	LT		562.74			CONCRETE SIDEWALK	
2	MARKET	105+87.93	106+22.00	LT/RT		1391.27			ASPHALT PAVEMENT	
2	MARKET	107+19.88	107+43.08	LT		226.00			BRICK PATIO	
2	MARKET	106+29.06	107+39.50	LT	110				CURB	
2	MARKET	107+56.05	108+81.76	LT		571.59			CONCRETE SIDEWALK	
2	MARKET	107+78.03	108+67.09	LT	89				CURB	
2	MARKET	108+21.41	108+81.13	RT		501.66			CONCRETE SIDEWALK	
2	MARKET	108+78.64	108+82.17	LT	9				CURB	
2	MARKET	108+86.83	109+06.92	RT		186.84			ASPHALT PAVEMENT	
2	FRONT	15+15.84	17+40.72	RT		2002.89			ASPHALT PAVEMENT	*
2	FRONT	15+21.08	16+81.57	LT		399.35			ASPHALT PAVEMENT	*
2	FRONT	15+31.13	15+69.67	RT		352.11			CONCRETE SIDEWALK	*
2	FRONT	15+49.32	15+53.04	LT		11.53			CONCRETE SIDEWALK	*
2	FRONT	15+75.37	16+36.80	RT	88				WOODEN FENCE	*
2	FRONT	15+82.13	15+85.55	LT		10.95			CONCRETE SIDEWALK	*
2	FRONT	15+94.49	16+74.11	LT		243.46			CONCRETE SIDEWALK	*
2	FRONT	16+12.54	16+16.77	RT		40.94			BRICK WALKWAY	*
2	FRONT	16+40.71	16+93.62	LT	49				WOODEN FENCE	*
2	FRONT	16+56.40	16+61.50	LT		28.22			BRICK WALKWAY	*
2	FRONT	16+59.62	16+64.83	RT		36.73			BRICK WALKWAY	*
2	FRONT	17+14.39	17+16.04	RT	25				WALKWAY PAVERS	*
2	FRONT	17+16.67	17+35.89	RT	34				CURB	*
2	FRONT	17+21.86	17+32.70	RT		100.00			LANDSCAPING	*
2	FRONT	72+49.03	72+59.08	LT/RT		220.00			ASPHALT PAVEMENT	*
2	FRONT	72+87.73	73+07.12	LT		184.11			ASPHALT PAVEMENT	*

1 ADDED

* = NON-PARTICIPATING ITEMS

NO DIRECT PAYMENT FOR SAWCUTS, SAWCUTS ARE NOT LISTED BUT ARE REQUIRED FOR ALL REMOVALS ADJACENT TO AN ASPHALT OR CONCRETE SURFACE TO REMAIN IN PLACE

ANY ITEMS FOR REMOVAL NOT LISTED ABOVE BUT REQUIRED FOR THE COMPLETION OF THE PROJECT SHALL BE INCLUDED IN THE LUMP SUM COST FOR REMOVAL OF IMPROVEMENTS

REMOVAL OF IMPROVEMENTS - 1 LUMP SUM

DU SHEET	ROADWAY	STATION (FROM)	STATION (TO)	LOCATION	LENGTH (FEET)	AREA (SF)	AREA (SY)	EACH	DESCRIPTION OF REMOVAL	
1	MARKET	101+76.47		LT				1	DECORATIVE LIGHT	
1	MARKET	102+48.62	102+82.14	LT	34				12" CPP	
1	3RD	34+70.25		LT				1	GRATE INLET	
1	3RD	34+35.68	35+18.43	RT	85				15" CPP	
2	MARKET	108+66.36		LT				1	GRATE INLET	
2	MARKET	108+66.36	108+83.22	LT	17				10" PVC PIPE	
2	FRONT	14+83.94	15+60.34	RT	76				12" PIPE	*
2	FRONT	15+60.34		RT				1	GRATE INLET	*
2	FRONT	15+60.34	17+23.18	RT	163				12" PIPE	*
2	FRONT	17+23.18		RT				1	GRATE INLET	*
2	FRONT	17+23.18	17+34.44	RT	16				15" PIPE	*

SN SHEET	ROADWAY	STATION (FROM)	STATION (TO)	LOCATION	LENGTH (FEET)	AREA (SF)	AREA (SY)	EACH	DESCRIPTION OF REMOVAL	
1	MARKET	101+74		RT				1	"DO NOT BLOCK DRIVEWAY" SIGN POST	
1	MARKET	102+47		LT				1	"NO VEHICLES ALLOWED..." SIGN POST	
1	MARKET	102+72		RT				1	STOP SIGN SW CORNER MARKET & 3RD	
1	3RD	34+69		RT				1	STOP SIGN NW CORNER MARKET & 3RD	
1	MARKET	103+31		LT				1	STOP SIGN NE CORNER MARKET & 3RD	
2	MARKET	105+64		RT				1	STOP SIGN SW CORNER MARKET & 2ND	
2	2ND	24+79		RT				1	STOP SIGN NW CORNER MARKET & 2ND	
2	MARKET	106+15		RT				1	STOP SIGN SE CORNER MARKET & 2ND	
2	MARKET	106+24		LT				1	STOP SIGN NE CORNER MARKET & 2ND	
2	MARKET	108+62		LT				1	NO PARKING HERE TO CORNER	
2	MARKET	108+80		RT				1	STOP SIGN SW CORNER MARKET & FRONT	
2	FRONT	14+60		RT				1	NO PARKING HERE TO CORNER	*
2	FRONT	14+75		RT				1	STOP SIGN NW CORNER MARKET & FRONT	*
2	FRONT	15+25		LT				1	STOP SIGN SE CORNER MARKET & FRONT	*
2	FRONT	15+37		RT				1	NO PARKING HERE TO CORNER	*
2	FRONT	17+20		RT				1	STOP SIGN NW CORNER FRONT & MILL	*
TOTAL					1 LUMP SUM					

* = NON-PARTICIPATING ITEMS

NO DIRECT PAYMENT FOR SAWCUTS, SAWCUTS ARE NOT LISTED BUT ARE REQUIRED FOR ALL REMOVALS ADJACENT TO AN ASPHALT OR CONCRETE SURFACE TO REMAIN IN PLACE

ANY ITEMS FOR REMOVAL NOT LISTED ABOVE BUT REQUIRED FOR THE COMPLETION OF THE PROJECT SHALL BE INCLUDED IN THE LUMP SUM COST FOR REMOVAL OF IMPROVEMENTS

EARTHWORK

PLAN SHEET X OF 2	FROM STATION	TO STATION	ROADWAY	LOCATION	LINEAR GRADING CLASS 2, MODIFIED (STA)	REMARKS	
1	100+34.24	102+88.08	MARKET	LT	2.5		
1	100+34.24	102+87.91	MARKET	RT	2.5		
1	102+80.00	103+24.00	MARKET	CL	0.4		
1-2	103+15.91	105+85.91	MARKET	RT	2.7		
1-2	103+16.06	105+86.08	MARKET	LT	2.7		
2	105+78.00	106+22.00	MARKET	CL	0.4		
2	106+13.91	108+86.88	MARKET	RT	2.7		
2	106+14.09	108+84.12	MARKET	LT	2.9		
2	15+21.13	17+19.70	FRONT	LT	2.0		*
2	15+31.12	17+38.72	FRONT	RT	2.3		*
PARTICIPATING SUBTOTAL					16.8		
NON-PARTICIPATING SUBTOTAL					4.3		
TOTAL					21.1		

* = NON-PARTICIPATING ITEMS

MOBILIZATION

TOTAL	1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING AND STAKING

TOTAL	1 LUMP SUM

POT HOLING UTILITY FACILITIES

TOTAL	22 EACH

SEWER LATERAL ADJUSTMENTS/RELOCATIONS

TOTAL	6 EACH

DISCLAIMER
THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411 RSMO) SPECIFICATION, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER

03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED: 3/31/2026
STATE: MO | SHEET NO.: 3
COUNTY: JEFFERSON
JOB NO.: STP-5507(607)
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE	DESCRIPTION
.	.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
725 MAPLE STREET
HILLSBORO, MO 63050
(636) 797-5340
WWW.JEFFCO.ORG

CMT
CRAWFORD, MURPHY & TILLY, INC.
ENGINEERING CORPORATION - 000631

QUANTITY SHEET
SHEET 2 OF 11
KIMMSWICK GREAT STREETS PHASE 1

SIDEWALK

PLAN SHEET X OF 2	FROM STATION	TO STATION	ROADWAY	LOCATION	TRUNCATED DOMES (SQFT)	CONCRETE CURB RAMP (EXPOSED AGGREGATE) (SQYD)	CONCRETE SIDEWALK, 4 IN. (EXPOSED AGGREGATE) (SQYD)	CONCRETE SIDEWALK, 7 IN. (EXPOSED AGGREGATE) (SQYD)	TYPE 5 AGGREGATE FOR BASE (4 IN. THICK) (SQYD)	REMARKS	
1	100+34.24	100+45.70	MARKET	LT				5.6	6		
1	100+34.24	100+94.70	MARKET	LT			73.3		73		
1	100+34.24	100+63.18	MARKET	RT				17.3	17		
1	100+34.24	101+53.18	MARKET	RT			122.5		123		
1	101+05.50	102+80.06	MARKET	LT			153.8		154		
1	101+68.18	102+79.93	MARKET	RT			99.3		99		
1	102+58.01	102+87.93	MARKET	RT	34			23.5	24		
1	102+65.33	102+88.06	MARKET	LT	34			18.7	19		
1	103+15.93	103+37.90	MARKET	RT	34			18.2	18		
1	103+16.06	103+48.31	MARKET	LT	34			25.1	25		
1	103+24.06	103+70.46	MARKET	LT			36.8		37		
1	103+80.46	104+42.14	MARKET	LT			77.5		78		
1-2	103+23.93	104+75.73	MARKET	RT			143.8		144		
2	104+56.63	105+29.06	MARKET	LT			67		67		
2	104+88.44	105+77.93	MARKET	RT			78.2		78		
2	105+40.06	105+67.89	MARKET	LT			23.4		23		
2	105+60.27	105+85.93	MARKET	RT	34			19.8	20		
2	105+67.89	105+86.06	MARKET	LT	34			24.8	25		
2	106+13.94	106+39.26	MARKET	RT	34			20.5	21		
2	106+14.06	106+31.19	MARKET	LT	34			23.1	23		
2	24+63.30	24+77.94	2ND	LT			20.1		20		
2	106+21.94	106+67.09	MARKET	RT			38.8		39		
2	106+31.19	107+44.19	MARKET	LT			125.9		126		
2	106+81.09	108+60.82	MARKET	RT			173.3		173		
2	107+55.19	108+75.09	MARKET	LT			135.6		136		
2	107+88.48	107+95.80	MARKET	LT		2.5			3		
2	108+49.02	108+84.12	MARKET	LT	24			43.6	44		
2	108+60.82	108+86.88	MARKET	RT	43			45.9	46		
2	15+21.13	16+96.62	FRONT	LT	20		121.9		122		*
2	15+31.13	15+39.06	FRONT	RT		15.4			15		*
2	15+39.06	15+69.68	FRONT	RT			30.3		30		*
2	15+69.68	15+75.68	FRONT	RT		3.7			4		*
2	15+75.68	16+64.82	FRONT	RT			64.5		65		*
2	16+74.45	17+09.70	FRONT	RT			22.5		23		*
2	17+01.55	17+38.72	FRONT	RT	41			47.3	47		*
2	17+06.62	17+19.70	FRONT	LT	21		7.7		8		*
2	17+13.52	17+17.52	FRONT	RT			11.2		11		*
PARTICIPATING SUBTOTAL FROM PAVEMENT					**-**	**-**	**-**	**-**	**512**		
NON-PARTICIPATING SUBTOTAL FROM PAVEMENT					**-**	**-**	**-**	**-**	**79**		
PARTICIPATING SUBTOTAL FROM CURB					**-**	**-**	**-**	**-**	**395**		
NON-PARTICIPATING SUBTOTAL FROM CURB					**-**	**-**	**-**	**-**	**96**		
PARTICIPATING SUBTOTAL					**339**	**2.5**	**1369.3**	**286.1**	**2568**		
NON-PARTICIPATING SUBTOTAL					**82**	**19.1**	**246.9**	**47.3**	**489**		
TOTAL					**421**	**21.6**	**1,616.2**	**333.4**	**3,057**		

1 ADDED

1 258.1 / 1,627.4

1 500 / 3,068

* = NON-PARTICIPATING ITEMS

STAIRS

PLAN SHEET X OF 2	FROM STATION	TO STATION	ROADWAY	LOCATION	CLASS B CONCRETE (MISC.) (CUYD)	REINFORCING STEEL (LBS)	REMARKS
1	100+38.35	100+45.46	MARKET	RT	1.3	60	PARCEL 13
2	106+39.01	106+46.80	MARKET	RT	1.3	60	PARCEL 20
2	107+06.77	107+11.77	MARKET	RT	0.2	10	PARCEL 21
2	107+29.39	107+34.42	MARKET	LT	0.8	50	PARCEL 11
2	108+56.99	108+65.18	MARKET	LT	0.6	30	PARCEL 12
TOTAL					**4.2**	**210**	

STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER
03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED
3/31/2026

STATE MO | SHEET NO. 3

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
725 MAPLE STREET
HILLSBORO, MO 63050
(636) 797-5340
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CMT
CRAWFORD, MURPHY & TILLY, INC.
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102 (314) 436-3500
ENGINEERING CORPORATION - 000631

QUANTITY SHEET
SHEET 5 OF 11

KIMMSWICK GREAT STREETS PHASE 1

TEMPORARY EROSION CONTROL

EC SHEET NO. (X OF 2)	FROM STATION	TO STATION	ROADWAY	LOCATION	CURB INLET CHECK (EACH)	SEDIMENT REMOVAL (CUYD)	COMPOST FILTER SOCK (LF)	REMARKS	
1	100+36.23		MARKET	RT	1	1.0			
1	100+54.46	100+71.57	MARKET	RT		1.6	16		
1	100+77.42	101+04.66	MARKET	RT		3.2	32		
1	101+07.42	101+20.02	MARKET	RT		1.3	13		
1	100+80.02	100+94.97	MARKET	LT		1.5	15		
1	101+44.20	101+53.18	MARKET	RT		0.9	9		
1	101+68.18	101+90.78	MARKET	RT		2.3	23		
1	101+93.92	102+87.29	MARKET	RT		9.6	96		
1	101+45.12	102+75.14	MARKET	LT		13.4	134		
1	102+50.82		MARKET	RT	1	1.0			
1	102+51.52		MARKET	LT	1	1.0			
1	102+81.63		MARKET	LT	1	1.0			
1	103+24.69		MARKET	LT	1	1.0			
1	103+50.97		MARKET	LT	1	1.0			
1	103+40.74		MARKET	RT	1	1.0			
1	103+53.25	103+64.27	MARKET	RT		1.2	12		
1	103+68.08	103+74.67	MARKET	RT		0.8	8		
1	103+80.67	104+05.28	MARKET	RT		2.5	25		
½	104+15.73	104+75.78	MARKET	RT		6.2	62		
1	103+17.33	103+33.26	MARKET	LT		2.2	22		
1	103+49.33	103+70.50	MARKET	LT		2.2	22		
1	103+80.50	103+96.78	MARKET	LT		1.8	18		
1	104+01.78	104+27.43	MARKET	LT		2.6	26		
2	104+87.97	105+85.88	MARKET	RT		11.8	118		
2	104+56.61	104+71.06	MARKET	LT		1.5	15		
2	104+76.06	104+84.90	MARKET	LT		0.9	9		
2	104+89.61	105+22.47	MARKET	LT		3.4	34		
2	105+40.14	105+82.17	MARKET	LT		4.8	48		
2	105+85.28		MARKET	LT	1	1.0			
2	106+17.62		MARKET	LT	1	1.0			
2	106+33.80		MARKET	LT	1	1.0			
2	106+41.97		MARKET	RT	1	1.0			
2	106+30.77	106+63.31	MARKET	LT		3.3	33		
2	106+70.41	107+19.90	MARKET	LT		5.0	50		
2	106+20.87	106+21.12	MARKET	RT		1.2	12		
2	107+71.13	108+21.38	MARKET	RT		5.0	50		
2	108+62.68		MARKET	RT	1	1.0			
2	108+58.46		MARKET	LT	1	1.0			
2	14+53.49		FRONT	RT	1	1.0			*
2	15+21.13	15+49.52	FRONT	LT		2.8	28		*
2	15+53.15	15+82.10	FRONT	LT		2.9	29		*
2	15+60.34		FRONT	RT	1	1.0			*
2	15+69.67	16+12.63	FRONT	RT		4.4	44		*
2	16+16.72	16+60.42	FRONT	RT		4.5	45		*
2	16+24.35	16+56.45	FRONT	LT		3.3	33		*
2	16+61.45	16+96.62	FRONT	LT		3.7	37		*
2	16+98.88		FRONT	RT	1	1.0			*
2	17+33.36		FRONT	RT	1	1.0			*
2	16+74.62	17+32.72	FRONT	RT		7.4	74		*
2	17+06.98	17+19.70	FRONT	LT		1.4	14		*
PARTICIPATING SUBTOTAL					**13**	**104**	**902**		
NON-PARTICIPATING SUBTOTAL					**4**	**35**	**304**		
TOTAL					**17**	**139**	**1,206**		

* = NON-PARTICIPATING ITEMS

FINAL SLOPE SURFACES

PLAN SHEET X OF 2	FROM STATION	TO STATION	BASELINE	LOCATION	TURF TYPE TALL FESCUE SODDING (SQYD)	GRAVEL (A) OR CRUSHED STONE (B) (SQYD)	LANDSCAPING RESTORATION (SQYD)	REMARKS	
1	100+52.82	101+53.18	MARKET	RT	46				
1	100+80.72	100+94.70	MARKET	LT	9				
1	100+94.70	101+45.10	MARKET	LT		34			
1	101+45.10	102+88.08	MARKET	LT	114				
1	101+53.18	101+68.18	MARKET	RT		7			
1	101+68.18	102+87.90	MARKET	RT	83				
1	35+22.00	35+31.86	3RD	CL		30			
1	103+16.08	103+70.48	MARKET	LT	34				
1	103+70.48	103+89.10	MARKET	LT		10			
1-2	103+15.91	105+85.88	MARKET	RT	117				
1-2	104+41.55	104+56.61	MARKET	LT		12			
2	104+56.61	105+22.47	MARKET	LT	24				
2	105+26.47	105+40.20	MARKET	LT		6			
2	105+40.20	105+86.08	MARKET	LT	40				
2	106+13.88	106+21.12	MARKET	RT	4				
2	106+16.68	106+38.35	MARKET	RT			9	PARCEL 20	
2	106+30.77	107+19.90	MARKET	LT	34				
2	106+47.47	106+63.65	MARKET	RT			4	PARCEL 20	
2	106+61.32	106+84.59	MARKET	RT		11			
2	107+24.45	107+71.13	MARKET	RT		26			
2	107+42.60	107+55.52	MARKET	LT		4			
2	107+71.13	108+21.38	MARKET	RT	17				
2	15+21.13	15+82.09	FRONT	LT	13				*
2	15+69.67	17+32.70	FRONT	RT	68			72 1	*
2	16+25.09	16+96.62	FRONT	LT	50				*
2	16+96.62	17+06.62	FRONT	LT		4			*
2	17+06.62	17+19.70	FRONT	LT	2				*
PARTICIPATING SUBTOTAL					**522**	**140**	**13**		
NON-PARTICIPATING SUBTOTAL					**133**	**4**	**-**		
TOTAL					**655**	**144**	**13**		

* = NON-PARTICIPATING ITEMS

1 137 659

DOWNSPOUTS

PLAN SHEET X OF 2	STATION	ROADWAY	LOCATION	DOWNSPOUT DRAIN PIPE ADJUSTMENT (LF)	REMARKS	
2	105+05.00	MARKET	LT	10	PARCEL 8	
2	105+29.00	MARKET	LT	10	PARCEL 8	
2	107+93.00	MARKET	RT	5	PARCEL 22A	
2	108+19.00	MARKET	LT	5	PARCEL 12	
2	108+67.00	MARKET	LT	5	PARCEL 12	
2	15+57.00	FRONT	RT	10	PARCEL 22B	*
VAR.	VAR.	VAR.	VAR.	50	FOR USE AS DIRECTED BY THE ENGINEER	
PARTICIPATING SUBTOTAL				85		
NON-PARTICIPATING SUBTOTAL				10		
TOTAL				**95**		

* = NON-PARTICIPATING ITEMS

STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER
03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED 3/31/2026

STATE MO | SHEET NO. 3

COUNTY JEFFERSON

JOB NO. STP-5507(607)

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JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
725 MAPLE STREET
HILLSBORO, MO 63050
(636) 797-5340
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CMT
CRAWFORD, MURPHY & TILLY, INC.
ENGINEERING CORPORATION - 000631

QUANTITY SHEET
SHEET 6 OF 11

KIMMSWICK GREAT STREETS PHASE 1

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MATCHLINE STA. 104+50.00

7 N/F ELIZABETH ROSE PROPERTIES LLC 209 MARKET ST ID: 09502102002101 141 SF TCE

8 VOID N/F BARBER JUDY M 205 MARKET ST ID: 09502102002019 NO ACQUISITION

9 N/F CITY OF KIMMSWICK 6051 2ND ST ID: 09502102002020 NO ACUISITION

10 N/F RENOVATION REAL ESTATE LLC 119 MARKET ST ID: 09502102002012 92 SF TCE

11 N/F BREER ROGER 111 MARKET ST ID: 09502102002204 165 SF TCE

N/F KIMMSWICK CITY OF 6057 3RD ST ID: 09502102002012 NO ACQUISITION

12 N/F KENNEDY HOME LLC BUILDING 6061 FRONT ST ID: 09502102002203 (DND) 91 SF TCE

N/F HUCKSTEP CINDY D 6054 FRONT ST ID: 09502102000100401 NO ACQUISITION

19 N/F BLUE OWL HOLDINGS LLC ID: 09502102002018 751 SF TCE

20 N/F MISSISSIPPI MUD GALLERY & GIFTS LLC 118 MARKET ST ID: 09502102002017 314 SF TCE

21 N/F GEISLER COURTLAND 114 MARKET ST ID: 09502102002302 420 SF TCE

22A N/F PEWS COMMERCIAL PROPERTY LLC 6101 FRONT ST ID: 09502102002013 461 SF TCE

22B N/F PEWS COMMERCIAL PROPERTY LLC ID: 09502102002013 215 SF TCE

23 N/F STANG FAMILY TRUST 6109 FRONT ST ID: 09502102002014 1162 SF TCE

24 N/F BEAN DONALD C & CHRISTINE M 101 MILL ST ID: 09502102002015 9 SF PE 441 SF TCE

25 N/F UNICORNUCOPIA LLC 6106 FRONT ST ID: 09502102001004 500 SF PE

26 N/F SIRACUSA PATRICIA R 6114 FRONT ST ID: 09502102001005 938 SF TCE

N/F BLUE OWL HOLDINGS LLC 6116 2ND ST ID: 09502102002013 NO ACQUISITION

N/F CAGLE KENNETH R & ELLEN K 110 MILL ST ID: 09502102003002 NO ACQUISITION

N/F BOYETTE STEVE E/& ROBIN M ETAL 102 MILL ST ID: 09502102003003 NO ACQUISITION

2ND ST. ℄ — MARKET ST ℄ — MILL ST. ℄ — FRONT ST. ℄ — MISSISSIPPI ST. — WITMOSOR HARBOR DR.

MILL/OVERLAY LIMIT STA. 34+62.58 — MILL/OVERLAY LIMIT STA. 25+31.52 — MILL/OVERLAY LIMIT STA. 14+68.97 — MILL/OVERLAY LIMIT STA. 109+10.53

PRIVATE DRIVE STA. 105+34.56 11' WIDTH — PRIVATE DRIVE STA. 104+82.09 13' WIDTH — PRIVATE DRIVE STA. 106+74.09 14' WIDTH — ALLEY ENTRANCE STA. 107+49.69 11' WIDTH — PRIVATE DRIVE STA. 16+69.72 9.7' WIDTH — PRIVATE DRIVE STA. 17+01.62 10' WIDTH

BEGIN PROJECT STA. 14+50.00 (FRONT)

END PROJECT STA. 109+30.00 (MARKET)

END PROJECT STA. 17+48.50 (FRONT)

CONSTRUCTION LIMIT — TREE (UIP) — BUILDING (DND) — PORCH (UIP) — PATIO (UIP) — FENCE (UIP) — STAIRS (UIP) — ADA RAMP (UIP) — CONCRETE STAIRS (R&R) — BRICK PATIO (R&R) — FENCE (UIP) — EX. SIDEWALK (R) — CONCRETE STAIRS — CONCRETE STEP — EXIST. FENCE (UIP) — 2' WIDE GUTTER — CUT IN SIDE-WALK AROUND TREE ROOTS (3' BUFFER TO TREE BASE) — RAMP — STAIRS & ADA RAMP (UIP) — TYPE S CURB — PROP. FENCE — BRICK WALKWAY (R&R) — EX. FENCE (R) — TREE (UIP) — STAIRS AND PORCH (UIP) — BRICK WALKWAY (R) — WALKWAY PAVERS (R) — 4' SIDEWALK — LANDSCAPING (R) — TREES (UIP) — ENTRANCE (R&R) — TREES (UIP) — EXIST. FENCE (UIP) — SMALL BLOCK WALL — SMALL BLOCK WALL R&R LANDSCAPING — LANDSCAPING (UIP) — PATIO (UIP) — BUILDING (UIP) — FRONT STEP (R&R) — EX. SIDEWALK (R) — WATER LINE EASEMENT BK 442 PG 224 — FENCE (R&R)

1 REVISED

SCALE
0 20 40 60

PLAN SHEET LEGEND

- EXISTING RIGHT OF WAY (EXIST. R/W)
- PERMANENT EASEMENT (P.E.)
- TEMPORARY CONSTRUCTION EASEMENT (T.C.E.)
- CONSTRUCTION LIMITS (SL)
- PROPOSED FIFTH STREET IMPROVEMENTS
- CONCRETE SIDEWALK
- PERMEABLE PAVER PARKING AREA
- CONCRETE PEDESTRIAN CROSSING AREA
- ASPHALT MILL/OVERLAY
- GRASS AREA
- GRAVEL AREA
- TRUNCATED DOMES
- 7" CONCRETE PAVED APPROACH

STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER
03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED: 3/31/2026
STATE: MO | SHEET NO.: 5
COUNTY: JEFFERSON
JOB NO.: STP-5507(607)
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
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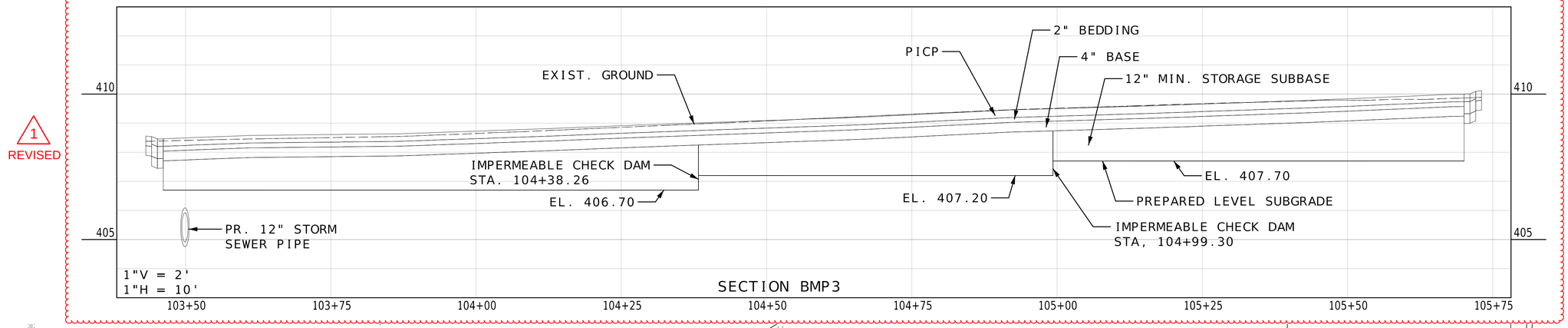
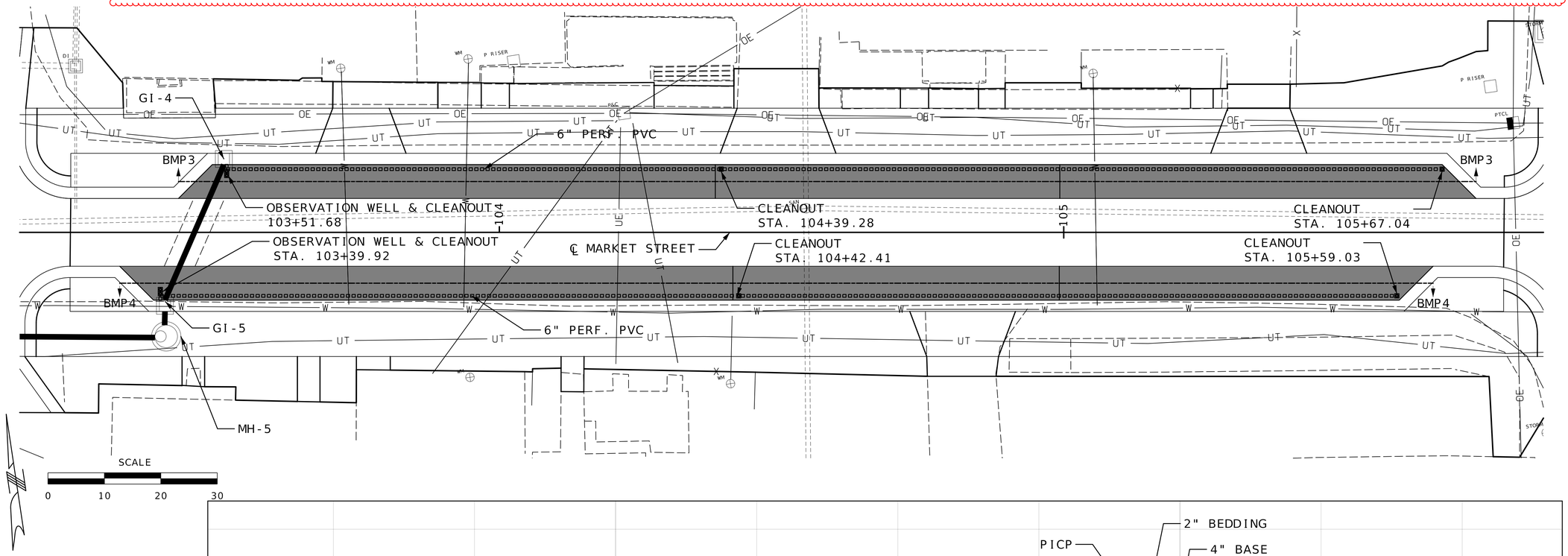
PLAN SHEET
SHEET 2 OF 2

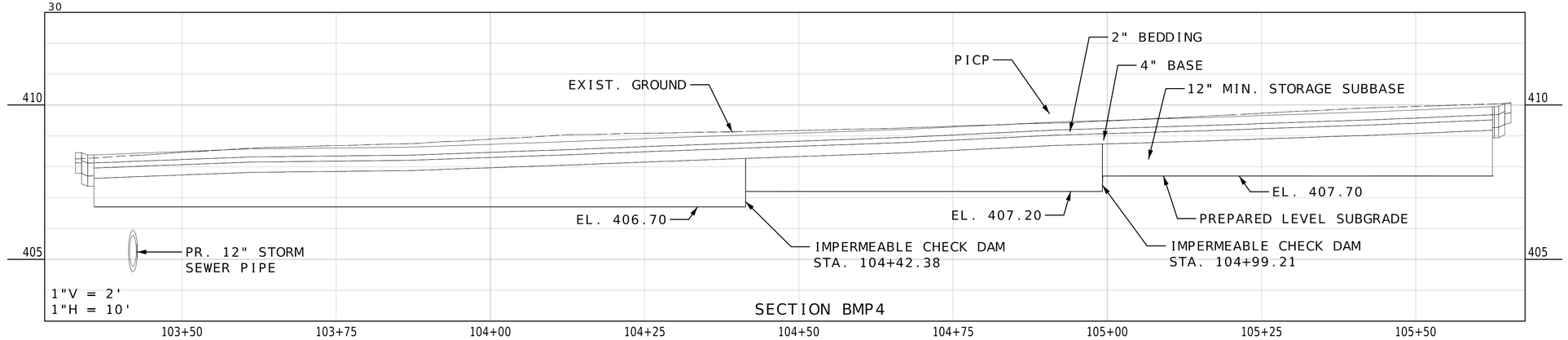
KIMMSWICK GREAT STREETS PHASE 1

L:\JeffersonCounty\22004405-00_KimmswickPh1\440500\Roadway\Sheets\Phase 1\004-005_Phase 1 Plan Sheets.dgn 5:26:43 PM 3/31/2026

1
REVISED







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BMP DETAILS - 3RD STREET TO 2ND STREET

STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER

03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED
3/31/2026

STATE	SHEET NO.
MO	17

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
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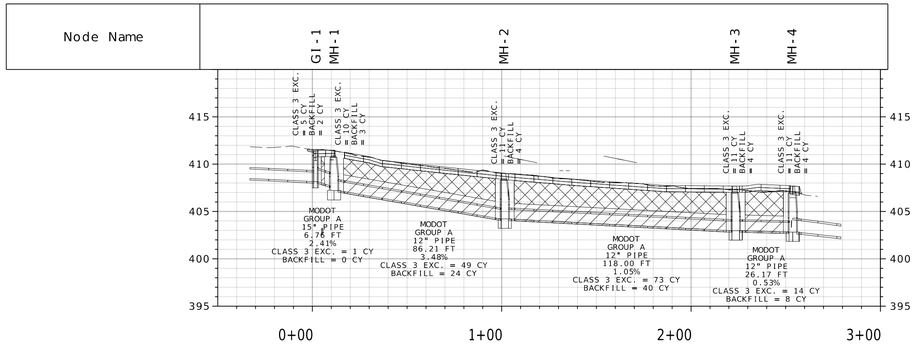
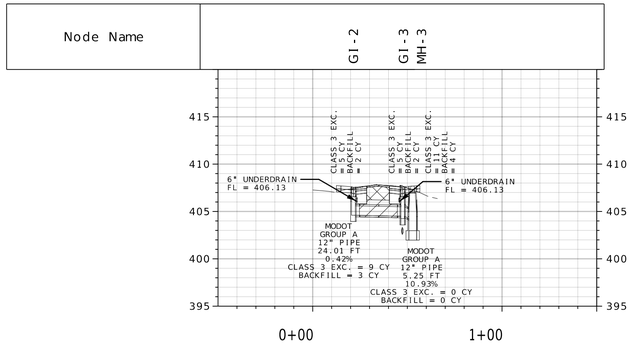
ENGINEERING CORPORATION - 000631

BMP DETAILS
SHEET 2 OF 6

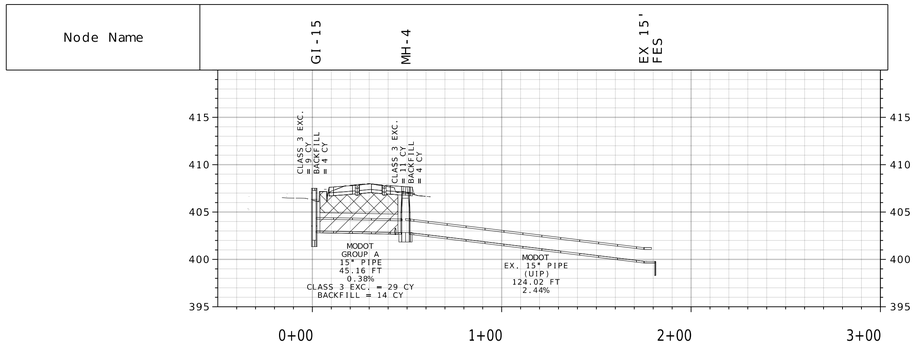
KIMMSWICK GREAT STREETS PHASE 1



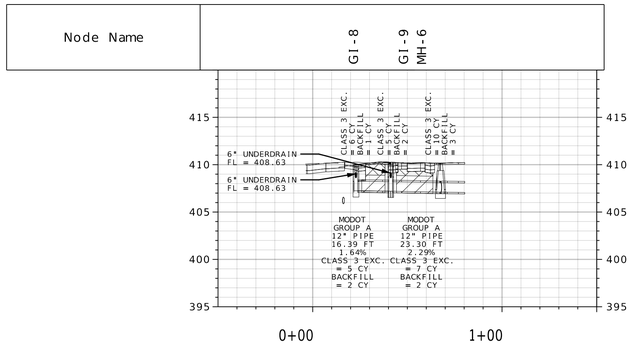
Structure Type	GRATE INLET	4' MANHOLE	4' MANHOLE	4' MANHOLE	4' MANHOLE
Station	100+36.44 MARKET ST.	100+38.91 MARKET ST.	101+29.10 MARKET ST.	102+51.08 MARKET ST.	102+81.20 MARKET ST.
Offset	6.00' RT	16.39' RT	17.01' RT	18.25' RT	18.25' RT
Ground Elevation	411.40	411.46	409.04	407.68	407.68
Invert Elevation	408.16	408.16 407.71	407.21	404.21 404.21	402.97 402.97 402.83 402.83
Bottom Elevation	408.16	407.21	404.21	402.97	402.83



Structure Type	GRATE INLET	GRATE INLET	4' MANHOLE
Station	102+51.72 MARKET ST.	102+51.02 MARKET ST.	102+51.09 MARKET ST.
Offset	14.00' LT	12.00' RT	18.25' RT
Ground Elevation	407.57	407.74	407.68
Invert Elevation	404.60	404.50 404.50	404.25
Bottom Elevation	404.60	404.50	402.97



Structure Type	GRATE INLET	4' MANHOLE	EX. 15' FES (UIP)
Station	102+81.84 MARKET ST.	102+81.20 MARKET ST.	36+44.36 3RD ST.
Offset	30.80' LT	18.25' RT	14.00' RT
Ground Elevation	407.51	407.68	401.04
Invert Elevation	403.00	402.83 402.83	399.80
Bottom Elevation	403.00	402.83	399.80



Structure Type	GRATE INLET	GRATE INLET	4' MANHOLE
Station	108+62.21 MARKET ST.	108+58.66 MARKET ST.	14+83.93 FRONT ST.
Offset	10.01' RT	8.00' LT	14.84' RT
Ground Elevation	410.00	410.27	410.13
Invert Elevation	407.25	407.20 407.20	407.10 407.10
Bottom Elevation	407.25	407.20	407.10

LEGEND
- CLASS 3 EXCAVATION
- BACKFILL

NOTE: GROUP A PIPE MATERIAL SHALL ONLY BE REINFORCED CONCRETE CULVERT PIPE OR POLYPROPYLENE PIPE. SEE JSP.

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STATE OF MISSOURI
REEM A. NASER
NUMBER PE-2024017333
PROFESSIONAL ENGINEER

03/31/2026 6:26:07 PM
Reem A. Naser - Civil
MO PE - 2024017333

DATE PREPARED
3/31/2026

STATE	SHEET NO.
MO	38

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
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(636) 797-5340
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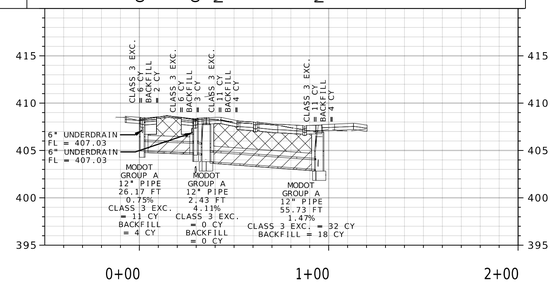
ENGINEERING CORPORATION - 000631

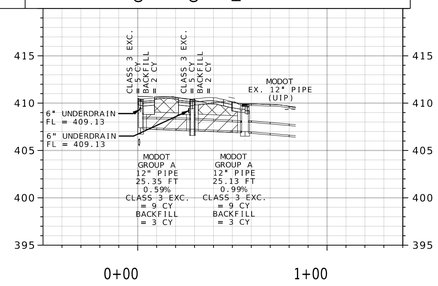
CULVERT SECTION SHEET

SHEET 1 OF 2

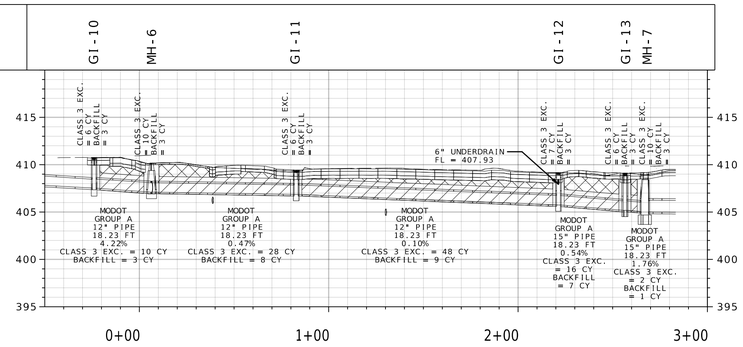
KIMMSWICK GREAT STREETS PHASE 1



Structure Type	GRATE INLET	GRATE INLET	4' MANHOLE	4' MANHOLE
Station	103+51.18 MARKET ST.	103+40.56 MARKET ST.	103+40.97 MARKET ST.	102+81.20 MARKET ST.
Offset	14.00' LT	12.00' RT	18.43' RT	18.25' RT
Ground Elevation	408.45	408.36	408.48	407.68
Invert Elevation	404.95	404.75	404.75 / 404.65	403.83	403.00
Bottom Elevation	404.95	404.75	403.82	402.83



Structure Type	GRATE INLET	GRATE INLET	EX. INLET (UIP)
Station	106+42.18 MARKET ST.	106+34.01 MARKET ST.	24+64.50 2ND ST.
Offset	12.00' RT	14.00' LT	17.69' LT
Ground Elevation	410.44	410.43	409.92
Invert Elevation	407.40	407.25 / 407.25	407.00
Bottom Elevation	407.40	407.25	407.00



Structure Type	GRATE INLET	4' MANHOLE	GRATE INLET	GRATE INLET	GRATE INLET	GRATE INLET
Station	14+52.07 FRONT ST.	14+83.93 FRONT ST.	15+59.33 FRONT ST.	16+97.88 FRONT ST.	17+32.59 FRONT ST.	72+67.02 MISSI-SSIPPI ST.
Offset	14.95' RT	14.84' RT	16.00' RT	16.00' RT	21.54' RT	14.12' LT
Ground Elevation	410.76	410.20	409.40	409.15	409.10	409.18
Invert Elevation	407.50 / 407.50	407.10 / 407.10	406.86 / 406.86	405.75 / 405.75	405.18	405.18 / 405.05	405.00
Bottom Elevation	407.50	407.10	406.86	405.75	405.18	405.00

LEGEND
- CLASS 3 EXCAVATION
- BACKFILL

NOTE: GROUP A PIPE MATERIAL SHALL ONLY BE REINFORCED CONCRETE CULVERT PIPE OR POLYPROPYLENE PIPE. SEE JSP.

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STATE OF MISSOURI
REEM A. NASER
NUMBER PE-2024017333
PROFESSIONAL ENGINEER
Reem A. Naser
03/31/2026 6:26:03 PM
Reem A. Naser - Civil
MO PE - 2024017333

DATE PREPARED
3/31/2026

STATE	SHEET NO.
MO	39

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
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MAPLE STREET ANNEX
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HILLSBORO, MO 63050
(636) 797-5340
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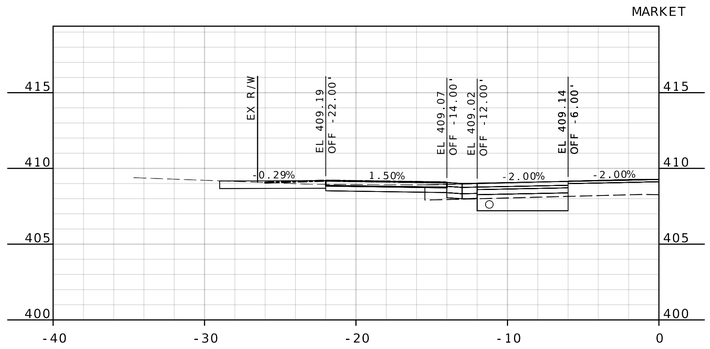
CULVERT SECTION SHEET

SHEET 2 OF 2

KIMMSWICK GREAT STREETS PHASE 1



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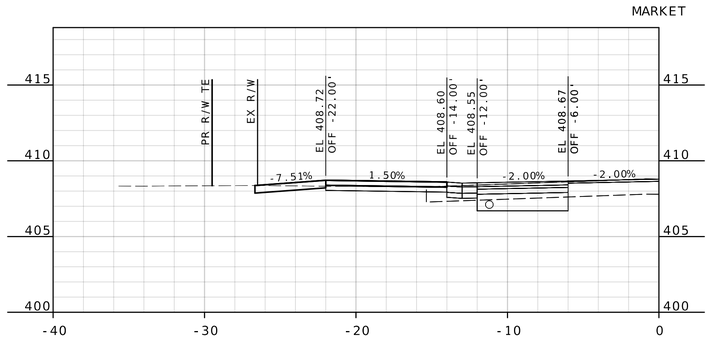

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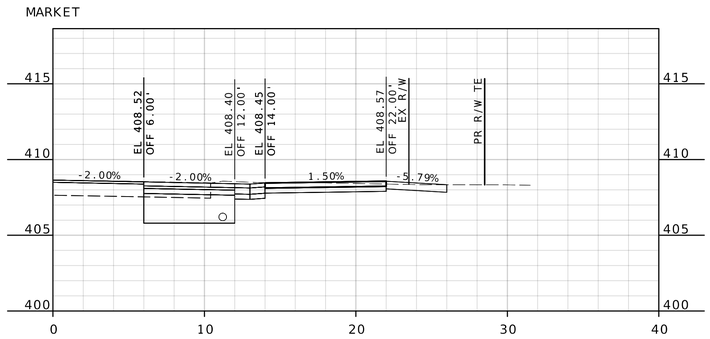

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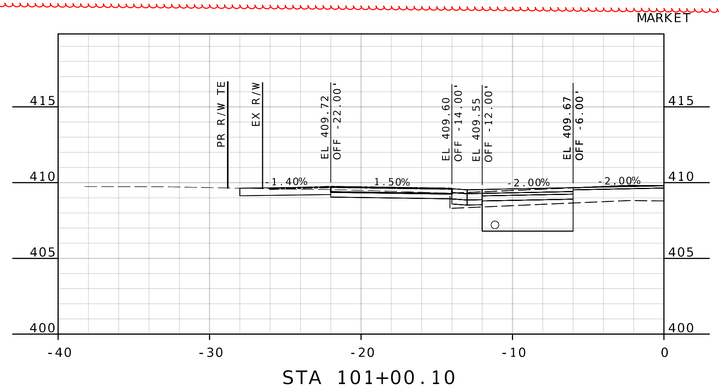

STA 101+00.10

1
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STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER

03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED
3/31/2026

STATE: MO | SHEET NO.: 18

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
.	.

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JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
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725 MAPLE STREET
HILLSBORO, MO 63050
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XS SHEET
SHEET 18 OF 20

KIMMSWICK GREAT STREETS PHASE 1

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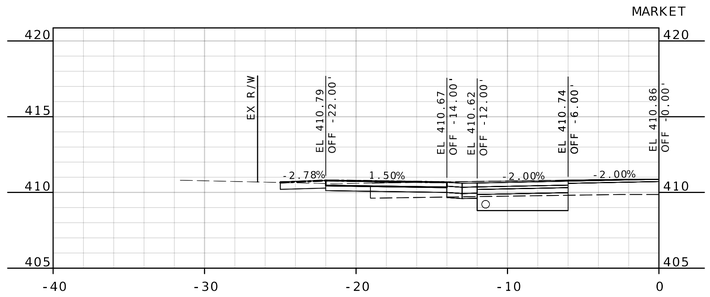

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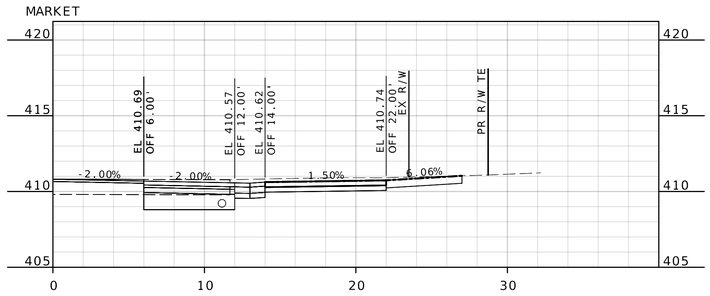

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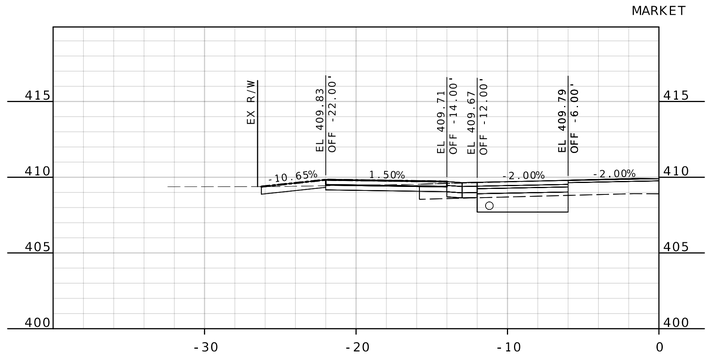

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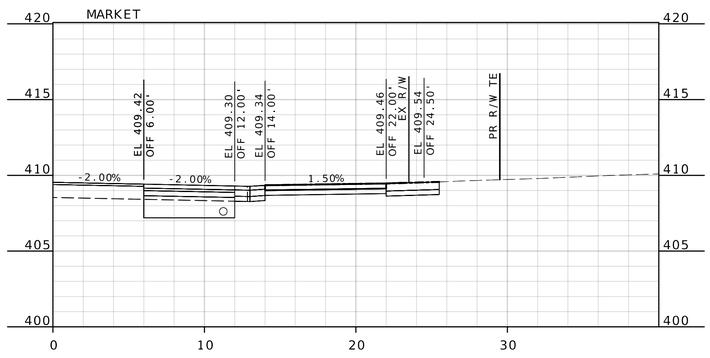

STA 104+82.09

1
REVISED

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

STATE OF MISSOURI
CASSANDRA MCKEE LEE
NUMBER PE-2023025373
PROFESSIONAL ENGINEER

03/31/2026
Cassandra McKee Lee - Civil
MO PE-2023025373

DATE PREPARED
3/31/2026

STATE MO | SHEET NO. 19

COUNTY
JEFFERSON

JOB NO.
STP-5507(607)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
.	.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
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ENGINEERING CORPORATION - 000631

XS SHEET
SHEET 19 OF 20

KIMMSWICK GREAT STREETS PHASE 1

L:\JeffersonCounty\22004405-00_KimmswickPh1\440500\Roadway\Model\Corridor Modeling\XS_Phase1_Driveways.dgn 5:15:34 PM 3/31/2026

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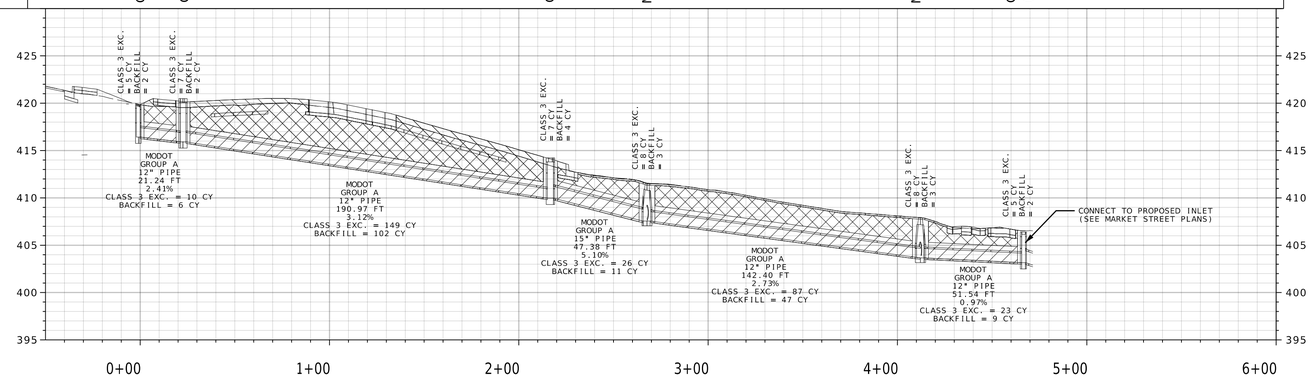
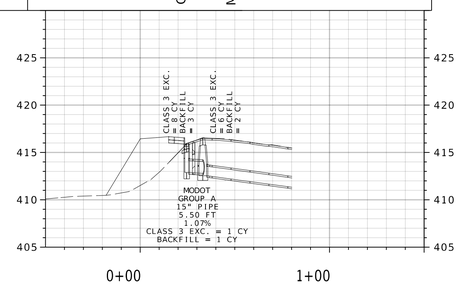
Node Name	GI-5	CI-1	CI-2	MH-1	MH-2	GI-1 (PH.1)



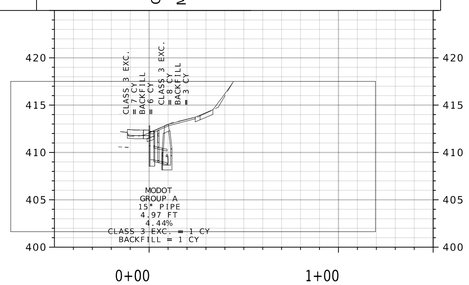
Structure Type	GRATE INLET	CURB INLET	CURB INLET	4' MANHOLE	4' MANHOLE	GRATE INLET
Station	60+29.64 BECKETT ST.	60+40.61 BECKETT ST.	62+33.99 BECKETT ST.	43+21.21 4TH ST.	44+66.58 4TH ST.	100+36.44 MARKET ST.
Offset	33.44' LT	13.99' LT	15.33' LT	6.17' LT	0.78' LT	6.00' RT
Ground Elevation	424.85	424.57	418.30	416.55	412.91	411.40
Invert Elevation	421.43	420.92 / 420.92	414.97 / 414.97	412.55 / 412.55	408.66 / 408.66	408.16 / 408.16
Bottom Elevation	421.43	420.92	414.97	412.55	408.66	408.16

Node Name	CI-3	MH-1



Structure Type	CURB INLET	4' MANHOLE
Station	43+20.90	43+21.21
Offset	16.15' LT	6.16' LT
Ground Elevation	415.88	416.55
Invert Elevation	412.88	412.80 / 412.55
Bottom Elevation	412.88	412.55

Node Name	CI-4	MH-2



Structure Type	CURB INLET	4' MANHOLE
Station	44+66.61	44+66.58
Offset	10.25' LT	0.78' LT
Ground Elevation	415.92	412.91
Invert Elevation	409.22	408.91
Bottom Elevation	409.22	408.66

LEGEND
CLASS 3 EXCAVATION
BACKFILL

NOTE: GROUP A PIPE MATERIAL SHALL ONLY BE REINFORCED CONCRETE CULVERT PIPE OR POLYPROPYLENE PIPE. SEE JSP.

1 REVISED

STATE OF MISSOURI
REEM A. NASER
NUMBER PE-2024017333
PROFESSIONAL ENGINEER
Reem A. Naser
03/31/2026 6:25:36 PM
Reem A. Naser - Civil
MO PE - 2024017333

DATE PREPARED
3/31/2026

STATE MO | SHEET NO. 29

COUNTY
JEFFERSON

JOB NO.
TAP-5445(613)

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
.	.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

JEFFERSON COUNTY, MISSOURI
DEPARTMENT OF PUBLIC WORKS
MAPLE STREET ANNEX
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(636) 797-5340
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ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102-2430 314.325.5500
ENGINEERING CORPORATION - 000631

CULVERT SECTION SHEET
SHEET 1 OF 1

KIMMSWICK GREAT STREETS PHASE 2